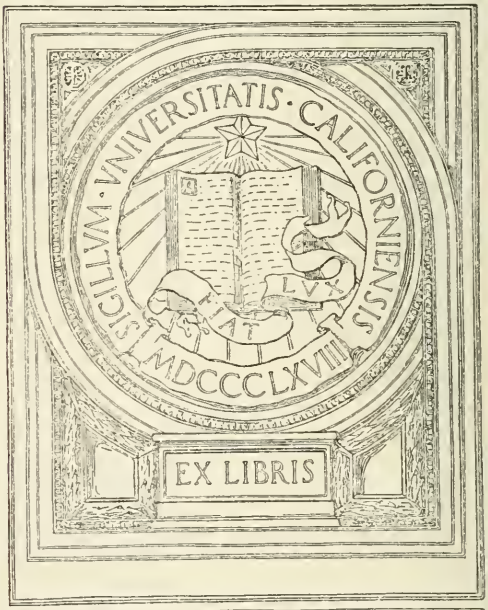
THE CHANGE TO MODERN ENGLAND (FROM 1750)

H. ALLSOPP

UNIVERSITY OF CALIFORNIA
LOS ANGELES



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THE CHANGE TO MODERN ENGLAND

THE OPENING OF LONDON BRIDGE, AUGUST 1, 1831.

(*From the painting by Clarkson Stanfield, R.A.*)

This splendid structure of stone, built at a cost of £1,500,000, replaced the old bridge that had existed from the Middle Ages.

THE CHANGE TO MODERN ENGLAND

(FROM 1750)
AN INTRODUCTORY SURVEY

BY

H. ALLSOPP

AUTHOR OF
"AN INTRODUCTION TO ENGLISH INDUSTRIAL HISTORY."

WITH A FOREWORD
BY THE LATE
A. L. SMITH, M.A.
THE MASTER OF BALLIOL COLLEGE, OXFORD.

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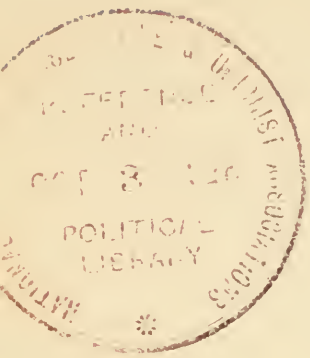

TO THE

TWO GRANNIES

WHOSE MEMORIES HAVE

REVIVIFIED MANY OBSCURE PLACES

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FOREWORD

By the late Master of Balliol

MR. BELLOC has defined a Preface as "praise of one's own book." This, however, is called a "Foreword" to show that it is praise of someone else's book. The praise is deserved, especially among books of Economic History, which so often are either vague and bald or swamped in details. This "Change to Modern England" takes that stock topic, the Industrial Revolution, and makes it living. It covers the main lines of the transition to present-day England, and makes them clear, striking and deeply interesting. It is written with the most agreeable lucidity of style, with simplicity that is never shallowness and with latent feeling that is never sentimentality. It certainly fills a gap, and should find a wide and varied circle of readers.

Arthur L. Smith.

Balliol College,
Oxford.

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AUTHOR'S PREFACE

THE main object in preparing this book has been to interest young people in social and industrial history by explaining broadly the meaning of the vast changes that have taken place in England since about 1750. Completeness has not been aimed at. Details have been used only to illustrate the various themes. If students are using this book under the guidance of a skilful teacher they will be trained to use other books also. For no attempt has been made to write here more than an interesting suggestive introduction to the period.

For this reason exercises are given at the end of the book to show the kind of way in which pupils may help themselves.

The book is based on a careful study of most of the recent literature dealing with the period as well as of much of the original material. Extracts from contemporary writings have been incorporated here and there, not only for their historical value and because they are such as interest young people, but also because it is felt that the separation of "sources" from a context is too often very misleading, even when they are read.

My particular thanks are due to Mr. H. G. Wood for his help in preparing the illustrations and especially the very useful maps. To the Master of Balliol I owe more than I can express.

H. A.

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THE CHANGE TO MODERN ENGLAND

CHAPTER I

INTRODUCTION

THE population of England in 1700 was about six millions ; in 1800 it was about ten millions ; in 1921 it was nearly forty millions. In other words, during the eighteenth century the population was nearly doubled, a very rapid increase ; but during the nineteenth century the population was quadrupled, a rate of increase that has probably never been equalled by any country save Canada. Such a rate of increase in the number of people to be governed must obviously produce very serious problems and difficulties for the rulers of any nation, as well as for the people themselves. It is quite clear, therefore, that the history of the last two centuries must in any case be the story of the changes and difficulties produced by this growth of the population.

But as though this were not enough of itself to provide problems for our statesmen of two centuries, there occurred during the same period what is known as the Industrial Revolution ; that is, a complete change in the habits of most of the people. There was

change in the ways in which they were fed and clothed, in their habitations and surroundings, in the methods by which they moved from place to place, in their whole outlook on life and on the world. The change, indeed, has been so great that if Daniel Defoe, like Robinson Crusoe himself, could come back to England to-day and make once more those journeys which he described so charmingly for us in the early part of the eighteenth century, he would find few parts of England which he would recognise as the places which he then visited.

It will easily be realised, therefore, that without a clear understanding of these mighty factors there can be no clear appreciation of our national history. Above all, there can be no true idea of the enormous improvements that have taken place in the last hundred years or so ; in decency, in comforts, in sanitation, in food, in the general standard of living, in the conditions of labour, in wages, in education, in recreations—in almost every aspect of social and industrial life. The improvements have been so great for the vast majority of English people that it is almost impossible to realise them. There are still evils to be removed, but those of a hundred years ago were far greater.

RURAL ENGLAND IN 1700

Defoe's journeys, of which he published very interesting accounts in 1724–26, were made

through an England which was almost purely rural, an England of tiny villages and small country towns. These villages and towns held very little communication with each other. Each little town served as a market for the villages round about it to the distance of, say, twelve to fifteen miles. To get some idea of Defoe's England one has only to visit some of the remoter parts of Oxfordshire, Berkshire, and Wiltshire, where the villages and towns remain very little changed to this day, except that communication between them is much easier and more frequent.

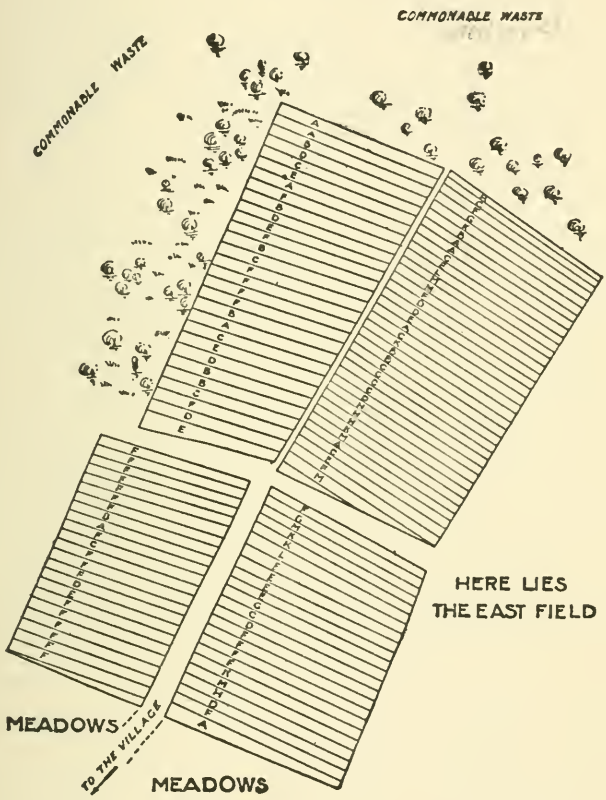
There is, however, even in these parts of England, one very great difference which would strike Defoe very forcibly. He would probably be amazed to see all the fields, whether big or little, divided from each other by trim hedges or stone walls. He would remember that when he visited them before, these districts contained few hedges, and such few as there were ran as a rule only along the roadsides or around some great man's garden or park. Most of the villages he saw consisted of a small cluster of cottages with possibly a mill, a church, and a manor-house and a few barns, surrounded by the great, open, unenclosed fields which died away in all directions up the hill-sides to the open waste of the moor, coppice, or woodland called the commonable waste.

Each village usually had three of these great, open unenclosed fields. Each field was plough-land; on one of them wheat was grown; on another oats or beans;

the third was lying fallow—that is to say, it had no crops. In this way each of the fields lay fallow for one year in every three, and on it would be folded—that is, enclosed in movable hurdles at various seasons—flocks of sheep or herds of cattle so that it might be naturally manured ready for the next crop. Care was also taken that the same crop should not be grown on the same ground two years in succession, for it had been known from time immemorial that if wheat, for example, were grown on the same piece of ground for several years running the later crops would be much poorer than the first. Different crops, like wheat, oats, or rye, did not fail to the same extent. Thus, by resting each field for one year, by the influence of the sun, rain, and frost, and by natural manuring, the arable land was kept reasonably fertile.

But you will ask, "If there were no hedges how could each villager know his own land? How did he plough it?" The answer is that *originally*, in the dim past, no man did know his own strips of land until the yearly ploughing had taken place and the strips had been reallotted. For in those days the operations of ploughing, sowing, and harvesting, as well as the keeping of sheep and cattle, were carried out almost entirely in common. Let us try to picture the process. Let us suppose that the village has three open fields of about 100 acres each. One of them is lying fallow. The west field is about to be ploughed. The villagers have in common perhaps three or four ploughs, and

PLAN OF OPEN FIELD
OF AN OLD VILLAGE.



they take it in turn to lend oxen—eight to a team—to draw each plough. In turn also they contribute their labour towards ploughing the west field. They are careful to leave a narrow strip of unploughed land, called a balk, when they have ploughed half an acre or an acre. The length and direction of the furrows would depend almost entirely on the lie of the land, and the worst patches of unfertile land would be left unploughed.

When the whole field was ploughed into these strips of half an acre (or an acre) each villager would receive the number of strips he was entitled to use. The plan on page 15 shows how the strips might be distributed amongst the lord, the parson, the freeholders, the copyholders, and the rest.

It may be asked, "How was the number of strips due to each person decided?" Originally far back in the Middle Ages it depended almost entirely on the man's rank. If he were a serf he would get none; a cottar would get perhaps five strips; a villein might get thirty. Freemen or other ranks might have any number; the parson would have the number fixed by the age-long custom of the manor; the lord of the manor would similarly have the number to which he was entitled by the custom of the manor. It was, in fact, this "custom of the manor" which, as declared by the old men of the village, regulated the distribution and working of the whole estate.

But long before the eighteenth century this

method of apportioning the strips had been almost entirely superseded, partly because the old classification of men by ranks—serfs, cottars, villeins, freemen—had disappeared, partly also because the idea of property in land had developed by slow stages. In the Middle Ages men did not *own* land; they only *held* it on certain conditions. The tenants in chief held it from the King on condition that they gave to the King military service and the feudal aids; the lesser tenants of all ranks held from the higher tenants on condition that they gave the overlord a portion of their produce and a part of their labour; and the lower the rank the greater the amount of labour that had to be given. In such a system of society—the feudal system—there is obviously no place for the buying and selling of land. But as feudalism died commercialism began to deal with land much as it dealt with the ordinary commodities of trade.

The most important of the early stages in this development were (*a*) the growing custom of paying a money rent instead of giving labour and produce; (*b*) the plan, largely adopted after the Black Death, of letting the land and all that was upon it by what is called a stock-and-land lease for a period of years; (*c*) the enclosure movements of the Tudor periods when, partly as a result of the confiscation by Henry VIII's Government of the great estates of the monasteries—estates which were generally sold to the highest bidder—and partly as a result of the need for

more grazing ground for sheep, a large part of the moorland waste, as well as some of the arable land, was enclosed for private purposes; (*d*) the re-allotment as years went on of the holdings of persons who died without heirs; and the acquisition, either by purchase or exchange, of scattered strips by holders who wanted their holdings in compact blocks of strips.

In these ways we get a fairly complete explanation of the gradual change that took place. The lord of the manor sold his rights; sub-tenants bought their rights to hold the customary number of strips or more, and in this way grew up the system of landholding that prevailed in Defoe's day. On the land there were then—

(1) Customary tenants, or copyholders, i.e. men who had a copy of a grant of land in early days, stating on what conditions the land was held; in other words, what were the customary payments for the land, in labour or in produce or in money.

(2) Leaseholders, who had a legal lease for a term of years and whose farms might be large or small.

(3) Freeholders, i.e., practically owners, being holders with or without conditions of large or small farms.

(4) Occupiers, or tenants at will, who had no legal evidence of their rights beyond perhaps the testimony of the oldest inhabitants. These men could in law be ejected at short notice.

It must be remembered, however, that some farms were already enclosed and either owned outright or

THE MARKET CART.

THE MARKET WAGGON.

Both pictures are by Thomas Gainsborough, R.A. (1727-1788). One shows farm hands on the way to market, and the other the return of an empty waggon after the sale of the produce.

A COTTAGE NEAR COLCHESTER IN 1797.
(*From the painting by W. R. Bigg, R.A.*)

held on lease ; they did not depend at all on the strip system.

Now it might be thought that all these changes in the methods of acquiring and holding land would have radically affected the methods of farming and the organisation of rural society ; but it must be remembered that even in the eighteenth century more than half the cultivable land of England was still unenclosed. And although there might be in the same village (manor) all types of holding (tenancy or ownership) and although the holdings might differ greatly in size, yet the usual life of the average farmer in 1750 was little, if any, different from that of the man who held the same land 300 years earlier.

Once the manor had consisted of the three large open fields plus the meadows and the commonable waste. In 1750 it probably consisted partly of unenclosed strips, some held in compact blocks, some in scattered holdings, partly of enclosed fields both arable and pasture. What had really broken down was the communal working of the three fields. Now each holder worked for himself as he liked. Even in the villages where the open fields were much as they had been for centuries the working of the arable land in common had almost disappeared.

The crops grown were much the same : wheat, oats, barley, beans; a few cabbages, onions, herbs and roots in the kitchen garden. But even in 1750 vegetables were hardly known in many of the wilder and more remote

parts of England. The animals, too, were much the same: a few barn-door fowls, flocks of sheep, and a few cattle. The growing on a large scale of turnips or mangel-wurzels as food for cattle was almost unknown; clover and lucerne were not grown as field crops; the yields of cereals were low owing to the poor manuring and primitive methods of cultivation; the crops of hay were too often light. A large proportion of the cattle had to be killed off at the beginning of each winter owing to the lack of winter feeding stuffs; the meat was salted for food and was eaten very sparingly.

In fact a great part of the farming, except in favoured districts, was mere subsistence-farming, and had it not been for the money gained by rearing sheep and selling or working the wool up into yarn the bulk of English rural inhabitants would have led a very precarious life. Even as it was, there were bad seasons when harvests were poor, when disease sadly reduced the number of sheep. Moreover, the sheep were too often poor small creatures, producing inferior wool.

At the same time it is probably true to say that the farming classes as a whole were fairly comfortable; their wants were few and simple, and more often than not those wants were gratified. This was in the main due to the part that WOOL played in their lives; wool from their own sheep was cleaned, prepared, spun, and sometimes woven into cloth in their own homes. In this work father, mother, and children,

and sometimes hired helpers, took part. Defoe's description of the way in which this was done is well known. This is his account of what has come to be called the Domestic System of industry (*domus* is Latin for a house) because it was carried on very largely in the houses of the workers:

"In the course of our road among the houses, we found at every one of them a little rill or gutter of running water: if the house was above the road, it came from it, and crossed the way to run to another; if the house was below us, it crossed us from some other distant house above it; and at every considerable house was a manufactory; which, not being able to be carried on without water, these little streams were so parted and guided by gutters or pipes, that not one of the houses wanted its necessary appendage of a rivulet. Again, as the dyeing-houses, scouring-shops, and places where they use this water emit it tinged with the drugs of the dyeing-vat, and with the oil, the soap, the tallow, and other ingredients used by the clothiers in dressing and scouring, etc., the lands through which it passes, which otherwise would be exceeding barren, are enriched by it to a degree beyond imagination.

"Then as every clothier must necessarily keep one horse, at least, to fetch home his wool and his provisions from the market, to carry his yarn to the spinners, his manufacture to the fulling-mill, and, when finished, to the market to be sold, and the like; so every one generally keeps a cow or two for his family. By this means, the small pieces of inclosed land about each

house are occupied, and, by being thus fed, are still farther improved from the dung of the cattle. As for corn, they scarce sow enough to feed their poultry.

"Such, it seems, has been the bounty of nature to this county, that two things essential to life, and more particularly to the business followed here, are found in it, and in such a situation as is not to be met with in any part of England, if in the world beside; I mean coals, and running water on the tops of the highest hills. I doubt not but there are both springs and coals lower in these hills; but were they to fetch them thence, it is probable the pits would be too full of water; it is easy, however, to fetch them from the upper parts, the horses going light up, and coming down loaden. This place, then, seems to have been designed by Providence for the very purposes to which it is now allotted, for carrying on a manufacture, which can nowhere be so easily supplied with the conveniences necessary for it.

"Nor is the industry of the people wanting to second these advantages. Though we met few people without doors, yet within we saw the houses full of lusty fellows, some at the dye-vat, some at the loom, others dressing the cloths; the women and children carding, or spinning; all employed from the youngest to the oldest; scarce anything above four years old, but its hands were sufficient for its own support. Not a beggar to be seen nor an idle person, except here and there in an almshouse built for those that are ancient, and past working.

"The people in general live long; they enjoy a good air; and under such circumstances hard labour

is naturally attended with the blessing of health, if not riches.

"From this account you will easily imagine that some of these remote parts of the North are the most populous places of Great Britain, London and its neighbourhood excepted."

But it must be observed that this is an account of the Domestic System at its best. What was the state of affairs after a bad harvest? or when wool was scarce? or when the demand for cloth failed? or when illness came? or when the worker got into the clutches of an itinerant wool-factor or merchant, whose warehouse was in Norwich or York, whose methods were sometimes unscrupulous, who underpaid, or paid in inferior goods, who sweated the home workers who had become dependent upon him? The conditions of many of the home workers in the tailoring and lace trades of our large cities to-day are bad enough; but the state of affairs must have been much worse in the eighteenth century when sanitation was unknown, when hours and conditions of labour were unregulated, when most children over four (as Defoe says) had to work at tedious and exhausting work in unwarmed garrets or barns.

Besides, Defoe is writing of Yorkshire, where the industry was still in his day much less closely organised than it was in the other great wool-working districts —the West of England and East Anglia. In these areas the factor or middleman had become a domi-

nating influence, as another extract from Defoe will show.

"First, the wool itself, being taken from the sheep's back, either by the shearer, the farmer, or by the fell-monger [1] from the skin, becomes a subject of trade, and is either sold to the stapler or wool merchant, and by him to the manufacturer, or is carried by the farmer and fell-monger, as is sometimes the case, to the particular counties where it is consumed.

"These staplers and wool-dealers are scattered all over the kingdom, and are a very important and considerable sort of tradesman, being the first tradesmen into whose hands the said wool comes for sale: the principal towns in England where they are found to be in any numbers together are London, or Southwark rather, being principally in Barnaby Street, and the town of Blandford in Dorsetshire; there are also some in Norwich and in Lincolnshire, and in Leicestershire a great many.

"Stourbridge fair is famous for the great quantity of wool sold there, and which goes beyond any other fairs or markets in all the north or east parts of England. But wherever the wool is carried, and by whomsoever it is sold, this of course brings it to the first part of its manufacturing, and this consists of two operations: 1. Combing; 2. Carding.

"The combers are a particular set of people, and the combing a trade by itself: the carding, on the other hand, is chiefly done by workmen hired by the

[1] A fell-monger was a man who bought skins, i.e. fells with the wool on them.

clothiers [1] themselves; the combers buy the wool in the fleece or in the pack, and when it is combed, put it on to the next operation on their own account. The carding is generally done by hired servants, as above; these operations hand on the wool to the next, which is common to both, viz. the spinning.

"But before it comes this length, it requires a prodigious number of people, horses, carts, or wagons, to carry it from place to place, for the people who spin it into yarn. On the contrary, some whole counties and parts of counties are employed in spinning, who see nothing of any manufacture among them, the mere spinning only excepted.

"Thus the weavers of Norwich and of the parts adjacent, and the weavers of Spitalfields in London, send exceeding great quantities of wool into remote counties to be spun, besides what they spin in both those populous counties of Norfolk and Suffolk; . . . and besides that, as if all this part of England was not sufficient for them, they send a very great quantity of wool 150 miles by land carriage to the North, as far as Westmoreland, to be spun; and the yarn is brought back in the same manner to London and to Norwich."

Think of the traffic this alone would cause on the bad roads, apart altogether from all the other goods that had to be transported. And most of the roads were barely wide enough for more than one vehicle at a time.

"There are prodigious numbers of sheep fed upon

[1] A clothier nowadays is a man who sells clothes. In former times he sold only *cloth*.

those almost boundless downs and plains in the counties of Dorset, Wilts, Gloucester, Somerset, and Hampshire, where the multitudes, not of sheep only, but even of flocks of sheep, are not to be reckoned up ; insomuch that the people of Dorchester say there are 600,000 sheep always feeding within six miles round that one town. . . . In those counties all the women inhabitants may be supposed to be thoroughly employed in spinning the yarn for them, and in those counties are, besides, the populous cities which I mention, because those who pretend to have calculated the numbers of people employed in these four counties assure me that there are not so few as a million of people constantly employed there in spinning and weaving for the woollen manufacture only ; that besides the great cities, towns, and seaports, there are not less than one hundred and twenty market towns, six large cities, and fifteen hundred parishes, some of which are exceedingly full of people.

" And yet, notwithstanding all this, such is the greatness of this prodigious manufacture, that they are said to take yearly thirty thousand packs of wool, and twenty-five thousand packs of yarn ready spun from Ireland.

" From hence, take a short view of the middle part of England; Leicester, Northampton, and Warwick shires have a prodigious number of large sheep, which, as is said of Lincolnshire, are bred for the London markets ; the wool, consequently, is of an exceedingly long staple, and the fineness is known also to be extraordinary. This wool is brought every week, Tuesday and Friday, to the market at Cirencester, on the edge

ENGLISH INDUSTRIES
AT ABOUT 1750.
EACH TOWN WOULD HAVE ITS OWN ARTISANS, SHOEMAKERS, JOINERS, CABINET-MAKERS CARTWRIGHTS, SADDLERS, SMITHS ETC, ETC.
COAL
GLASS
SOPES
SHIPS
SALT
COAL
WOOL
LACE
FISHING
WOOL
WOOL
COAL
LEEDS
LEATHER
LIVERPOOL
SALT
COTTON
POTTERY
FUSTIANS
TAPES
MANCHESTER
SHEFFIELD
CUTLERY
PLATE
SHIPS
MACCLESFIELD
POTTERY
WOOL
WREXHAM
SILK
LEAD
LEATHER
SALT
DERBY
NOTTINGHAM
KNITTING MACHINE WORK
FISHING
WOOL
WALSALL
LEATHER
POTTERY
LEICESTER
LACE
WOOL
IRON
BRASS
COPPER
GLASS
BIRMINGHAM
GUN-FLINTS
COVENTRY
SILK
LACE
KIDDERMINSTER
CARPETS
SALT
REDDITCH
NEEDLES
NORTHAMPTON
WOOL
IPSWICH
GLOUCESTER
TANNING
LEATHER
IRON
TIN
WOOL
BURFORD
LEATHER
COAL
BRISTOL
BRASS
SAILS
LEATHER.
WOOL
POTTERY
SILK
DELFT
CLOCKS
PEWTER
LEATHER
SHIPS
POTTERY
WOOL
SALT
LACE
LACE
WOOL
IRON SMELTING
WOOL
BRIDPORT
ROPE
SALT
SALT
FISHING
WOOL
FISHING
FISHING

of Gloucester and Wilts ; the quantity is supposed to be at least five hundred packs of wool per week. Here it is bought by the wool-combers and carders of Tedbury, Malmesbury, and the towns on all that side of Wilts, and Gloucester, besides what the clothiers themselves buy ; these carry it out far and near among the poor people of all the adjacent counties, for the spinning ; and having made the yarn, they supply that manufacture as far as Froome, Warminster, and Taunton, and thus the west country is furnished.

" The North requires another inspection ; the rest of the Leicestershire wool merchants, who do not bring their wool southward, carry it forward to the North, to Wakefield, Leeds, and Halifax ; here they mix it with, and use it among, the northern wool, which is not esteemed so fine.

" Not forgetting, notwithstanding, that they have a great deal of very fine wool, and of a good staple, from the wolds or downs in the East Riding of Yorkshire, and from the bishoprick of Durham, more especially the banks of the Tees, where, for a long way, the grounds are rich, and the sheep thought to be the largest in England. Hither all the finest wool of those counties is brought ; and the coarser sort, and the Scots' wool which comes into Halifax, Rochdale, Bury, and the manufacturing towns of Lancashire, Westmoreland, and Cumberland, are employed in the coarser manufactures of those counties, such as kerseys, half-thicks, yarn stockings, duffields, rugs, Turkey work, chairs, and many other useful things, which those counties abound in."

A short extract from a book written in 1828 by

William Radcliffe, a manufacturer who, at one time, is said to have employed over 1,000 home-spinners spread over three counties, shows how a small man became a big one in the years 1785 to 1807.

"The principal estates being gone from the family, my father resorted to the common but never-failing resource for subsistence at that period, viz. the loom for men, and the cards and hand-wheel for women and boys. He married a spinster (in my etymology of the word) and my mother taught me (while too young to weave) to earn my bread by carding and spinning cotton, winding linen or cotton weft for my father and elder brothers at the loom, until I became of sufficient age and strength for my father to put me into a loom. After the practical experience of a few years, any young man who was industrious and careful, might then, from his earnings as a weaver, lay by sufficient to set him up as a manufacturer, and though but few of the great body of weavers had the courage to embark in the attempt, I was one of the few.

"Availing myself of the improvements that came out while I was in my teens, by the time I was married (at the age of 24, in 1785), with my savings, and a practical knowledge of every process from the cotton-bag to the piece of cloth, such as carding by hand or by the engine, spinning by the hand-wheel or jenny, winding, warping, sizing, looming the web, and weaving either by hand or fly-shuttle, I was ready to commence business for myself; and by the year 1789 I was well established, and employed many hands both in spinning and weaving, as a master manufacturer.

"Before the end of the month I began to divide the labour of the weavers, employing one room to dress the whole web, in a small frame for the purpose, ready for the looms in another room, so that the young weaver had nothing to learn but to weave; and we found this a great improvement.

"In the year 1770 the land in our township was occupied by between fifty to sixty farmers; rents, to the best of my recollection, did not exceed 10*s.* per statute acre, and out of these fifty or sixty farmers there were only six or seven who raised their rents directly from the produce of their farms; all the rest got their rent partly in some branch of trade, such as spinning and weaving woollen, linen, or cotton. The cottagers were employed entirely in this manner, except for a few weeks in the harvest. Being one of those cottagers, and intimately acquainted with all the rest, as well as every farmer, I am the better able to relate particularly how the change from the old system of hand-labour to the new one of machinery operated in raising the price of land in the subdivision I am speaking of.

"Cottage rents at that time, with convenient loom-shop and a small garden attached, were from one and a half to two guineas per annum. The father of a family would earn from eight shillings to half a guinea at his loom, and his sons, if he had one, two, or three alongside of him, six or eight shillings each per week; but the great sheet-anchor of all cottages and small farms was the labour attached to the hand-wheel, and when it is considered that it required six to eight hands to prepare and spin yarn, of any of the three materials I have

mentioned, sufficient for the consumption of one weaver —this shows clearly the inexhaustible source there was for labour for every person from the age of seven to eighty years (who retained their sight and could move their hands) to earn their bread, say one to three shillings per week, without going to the parish.

"From the year 1770 to 1788 a complete change had gradually been effected in the spinning of yarns. That of wool had disappeared altogether, and that of linen was also nearly gone: cotton, cotton, cotton, was become the almost universal material for employment. The hand-wheels, with the exception of one establishment, were all thrown into lumber-rooms, the yarn was all spun on common jennies, the carding for all numbers, up to 40 hanks in the pound, was done on carding engines; but the finer numbers of 60 to 80 were still carded by hand, it being a general opinion at that time that machine-carding would never answer for fine carding numbers. In weaving no great alterations had taken place during these eighteen years, save the introduction of the fly-shuttle, a change in the woollen looms to fustians and calico, and the linen nearly gone, except the few fabrics in which there was a mixture of cotton. To the best of my recollection there was no increase of looms during this period—but rather a decrease.

"I shall confine myself to the families in my own neighbourhood. These families, up to the time I have been speaking of, whether as cottagers or small farmers, had supported themselves by the different occupations I have mentioned in spinning and manufacturing, as their progenitors from the earliest institutions of

society had done before them. But the mule-twist now coming into vogue, for the warp, as well as weft, added to the water-twist and common jenny yarns, with an increasing demand for every fabric the loom could produce, put all hands in request of every age and description.

"The fabrics made from wool or linen vanished, while, the old loom-shops being insufficient, every lumber-room, even old barns, cart-houses, and out-buildings of every description were repaired, windows broke through the old blank walls, and all fitted up for the loom-shops. This source of making room being at length exhausted, new weavers' cottages with loom-shops rose up in every direction: all immediately filled, and when in full work the weekly circulation of money, as the price of labour only, rose to five times the amount ever before experienced in this sub-division, every family bringing home weekly 40, 60, 80, 100, or even 120 shillings per week."

The fact really was that the demand for yarn steadily increased during the century; the pressure on spinners became more and more severe; every possible device seems to have been adopted by the middlemen to increase the output of yarn. This was especially the case after the invention of Kay's flying shuttle enabled the weavers to turn out cloth eight or ten times as fast as before. Thus there was already growing up under the so-called domestic system a large class of rural workers in whose lives the cultivation of land played a steadily decreasing part. To these families

the middleman supplied wool; he paid them for spinning it into yarn, and others for weaving it and preparing it for use as cloth of various kinds. Thus in some districts there would be few houses in which spinning for some middleman was not the chief occupation. In other districts most houses would contain hand-looms in which cloth was woven for other middlemen.

The helpless dependence of most of these home-workers on an unscrupulous factor need not be emphasised, nor need the obvious effects on agriculture. English farming was already stagnant, unprogressive, wasteful and unenlightened. Only in the best seasons did England produce an appreciable surplus of food which she could export; and then it was only corn.

CHAPTER II

FACTORS MAKING FOR CHANGES IN FARMING

IT is easy to see now that the English system of farming and the domestic system of industry were already very unstable and unsatisfactory in the early years of the eighteenth century. Even if no new forces had come into English economic life great changes would certainly have come, though perhaps slowly.

But there were great new forces shaping the nation's destiny :

(1) Scientific farming was developing. There were enlightened gentlemen farmers like Townsend, Young, Bakewell, and Coke already experimenting on enclosed farms with what is called selective breeding of horses, sheep, pigs, and cattle. They were breeding strains of animals that, with continued careful selection, would produce large stocks of animals much finer for any given purpose than any ever known before.

They and other farmers were experimenting with additional crops, such as turnips. More attention was paid to selection of seeds, to manuring, and to draining.

But all these developments obviously required, as a

necessary condition for success, enclosed fields used only by the experimenters. Clearly the open field system, with its strips and its common pastures, was useless for such purposes. A powerful impulse then was given to a new enclosure movement.

(2) The population was rapidly increasing, perhaps as a result of the long period of peace which Walpole gave the country, perhaps as a result of the rapid decay of the apprenticeship system under which it was illegal for a young man to marry until he had completed his years of apprenticeship. More food was therefore needed: mere subsistence farming could no longer suffice if the nation was to be fed.

(3) Trade was rapidly increasing, both with our new colonies and with the Continent. To pay for our imports the Government desired to export corn, and therefore gave a bounty to the exporter of every quarter of corn.

(4) The proportion of the population who were not producers of food was very rapidly increasing, largely owing to the invention of certain machines and processes that will be described later.

(5) The Seven Years War, followed thirty years later by the terrible Revolutionary and Napoleonic Wars, shook the economic structure of England to its foundations, if only because of their constant drain on man-power.

Now any one of these great factors alone would probably have been sufficient to undermine the exist-

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ing agricultural system. But they all came into play within a period of forty or fifty years—all demanding urgently the production of more food. In the national interest the wasteful use of land could not be allowed to continue. In the interest of the starving poor, even of the more prosperous hand-workers, more food must be produced. It could be done only in one way. The open fields must be enclosed; only by giving every farmer his land in compact, enclosed blocks could these convergent needs be met.

Stated thus baldly it looked on paper as though the problem for the statesmen of those days was simple enough: the needs were clear and urgent, the remedies were obvious. But the results of those remedies, when applied, were too often disastrous to hundreds of innocent folk. The problem was in fact too difficult for the statesmen of that age. It would probably be too hard for the statesmen of our own time.

On the one hand were the large landowners; Parliament was almost entirely dominated by them. Most of them, perhaps because they were more enlightened or because they were more selfish, were almost to a man ardently keen to have the open fields and commons enclosed. On the other hand, there were very few of the small holders who were not bitterly hostile to any such proposal, possibly because they were unenlightened, unable to see the great issues involved; perhaps because they too were thinking only of their own interests. However that may be, no matter which of all

these great causes was the more important, the result was that more land had to be cultivated, and the land already cultivated had to be made to produce more food per acre than it had ever done before.

Thus we get the Enclosure Movement of the eighteenth succeeded by that of the nineteenth century; so that by about 1850 the proportion of cultivable land unenclosed in England was a very small fraction of the whole. In 1750 that fraction was probably over a half. During the intervening years an Agrarian Revolution had taken place which altered the very appearance of rural England. The typical village of 1750 was a cluster of cottages round a church and a mill surrounded by great open fields and commonable waste. The same village in 1850 was a smaller cluster of cottages round the same old church and the same old mill, now probably falling to ruin, surrounded by scores of small fields hedged round and gated, with little or no commonable waste. There was little or no communal life; it was each man for himself and let the weakest go to the wall.

CHAPTER III

THE ENCLOSURES BY CONSENT

HOW, then, were these enclosures brought about? What happened when the village lands were redivided and passed into individual ownership or tenancy? The process usually began with one or two of the richest holders of land in the village, usually the lord of the manor. Sometimes he would call a meeting of all the holders of land on the manor. He or his agent, steward, or bailiff would explain the advantages to be derived from reallotting the holdings of each man in compact farms for each man to manage in his own way. Often after much discussion and persuasion, an agreement was reached to enclose the manor; then persons, usually a lawyer amongst them, would be appointed to make a map of the manor as it then was; to interview every holder, rich and poor; and to decide how much land each holder was entitled to. Then it was their duty to divide up the available land into the necessary lots, allowing a certain amount for new roads and paths, a certain other amount as compensation to the lord for permitting the enclosure, and for surrendering certain manorial customs and rights.

For the richer men, the big holders of big rights, and for the successful farmers, the process was fairly easy; they were usually dealt with first, and they proceeded to make hedges, fences, ditches round their various fields, some for arable, some for pasture. If they were good farmers and good business men they succeeded. If not they muddled along, and either failed altogether and gave up possession or died leaving their farms heavily mortgaged.

But what of the smaller men? Among them were the occupiers, or tenants at will—that is, men who lived on the manor and cultivated some land, but could not produce legal evidence as to how they obtained the right to a share in the manor, its land, its privileges, its produce. Sometimes they were descendants of families that had lived in the manor for generations; sometimes they were fairly recent immigrants who had, no matter how or why, drifted into the manor, had settled on some odd corner of land, built a hut or a hovel there, and been allowed to remain because labour was scarce on the manor, and another pair of hands, possibly several pairs, if wife and children were included, was very welcome.

There they were; unable to show any legal document to prove their right to a share in the manor; their names were not on the lord's roll or list of holders.

Sometimes the lords or their agents were merciful, and arranged that where, by the testimony of old inhabitants or of old records, it could be shown that

a man or his ancestors had been on the manor for a stated number of years, then, and only then, could he be allowed to remain and to receive a plot of land roughly equivalent to that he already cultivated.

But on many manors these proofless men were given nothing; in some cases they were literally turned adrift, in others they remained on in their huts as day labourers, owning no land of their own, dependent, with their wives and families, on more or less casual labour. From this time onward dates the rapid growth of that class of the community—the agricultural labourers—who still drift, often with their families, from farm to farm at the yearly or half-yearly hiring fairs.

The numbers in that class were greatly increased from the ranks of the small holders who *could* prove their right to a share of the land. Many of them were entitled to receive small farms; but they had to fence them and drain them at their own cost. Moreover, whereas formerly they had been able to put a relatively large number of cows, sheep, or pigs on to the commonable waste to graze, now they had only their own fields of pasture land, which could not maintain anything like the same number. Then, too, they were unskilled in farming *for themselves*; they often lacked initiative and self-reliance; the open field village had provided little scope for such qualities. Nor could they afford to hire labour. Sometimes, indeed, they had to pay a proportionate part of the expenses of the

lawyers, surveyors, and agents. At any rate, from one cause or another there were in most newly enclosed villages a few men with small holdings (possibly even a few with large holdings) who could not cope with the necessities and difficulties caused by the new situation.

What was to be their fate? Some no doubt struggled on, trying to make ends meet by increasing, if they could, the amount of spinning and weaving in their homes. They, their wives and children, were driven to toil longer and harder day after day, night after night, by the light of tallow dips or rush-lights, so that there might be enough yarn or cloth to take to the nearest wool market on the father's back; or to await the coming of the agent of the middleman who would buy it from them. Imagine the strain and pressure on such families in a period of bad harvest or ill-health! What must the lives of the children have been? No warm, healthy schools to go to; poor clothing; coarse food with little meat; a dark, insanitary and overcrowded house. That is the black side of Defoe's picture.

For such people there was little to do save to sell the small holding and the cottage; the large holders were only too ready to buy at a starvation price. Then the man must either remain as a day labourer, if he could find another cottage, or he must go elsewhere to seek work. It was useless to go to another village; conditions there were unfavourable to new men. He must drift either to a town or to the North

of England where the new factories, mines, and foundries were being rapidly developed.

Most of these men, their wives and their children, had already some experience in the processes of preparing, spinning, and weaving wool. Is it very wonderful that a steadily growing stream of dispossessed small holders should flow towards Derbyshire, Lancashire, and Yorkshire, where the preparation and spinning and weaving of wool and cotton were becoming the staple trades dominating all others in those counties? Thousands of families drifted northwards from the eastern, midland, southern, and western counties. Tramping from town to town, buying or begging their food, they sought the mills which would provide men, women, and children with twelve, fifteen, sixteen hours of toil every day. Homes they had to find as best they could.

Housing accommodation in the neighbourhood of the mills was often unobtainable. However quickly builders erected rows on rows of small cottages, all alike, still more and more were wanted in the growing towns of Lancashire and Yorkshire. Overcrowding was hardly thought of; a barn often accommodated several families. Others slept in the mills beside the machines.

And still the stream of dispossessed flowed northwards, and still the need for producing more food increased!

EARLY MORNING AT DUNSTABLE: GETTING READY FOR THE WEEKLY MARKET.

Dunstable is an example of a market town which has grown up at a place where two ancient roads, Watling Street and the Icknield Way, cross each other. There probably was a village here from British or Roman times, but Henry I. is said to have cleared the forest and given the town room to grow. He founded the famous Priory of Dunstable and granted the town the right of holding a fair and also a market, which is still kept up, as the picture shows.

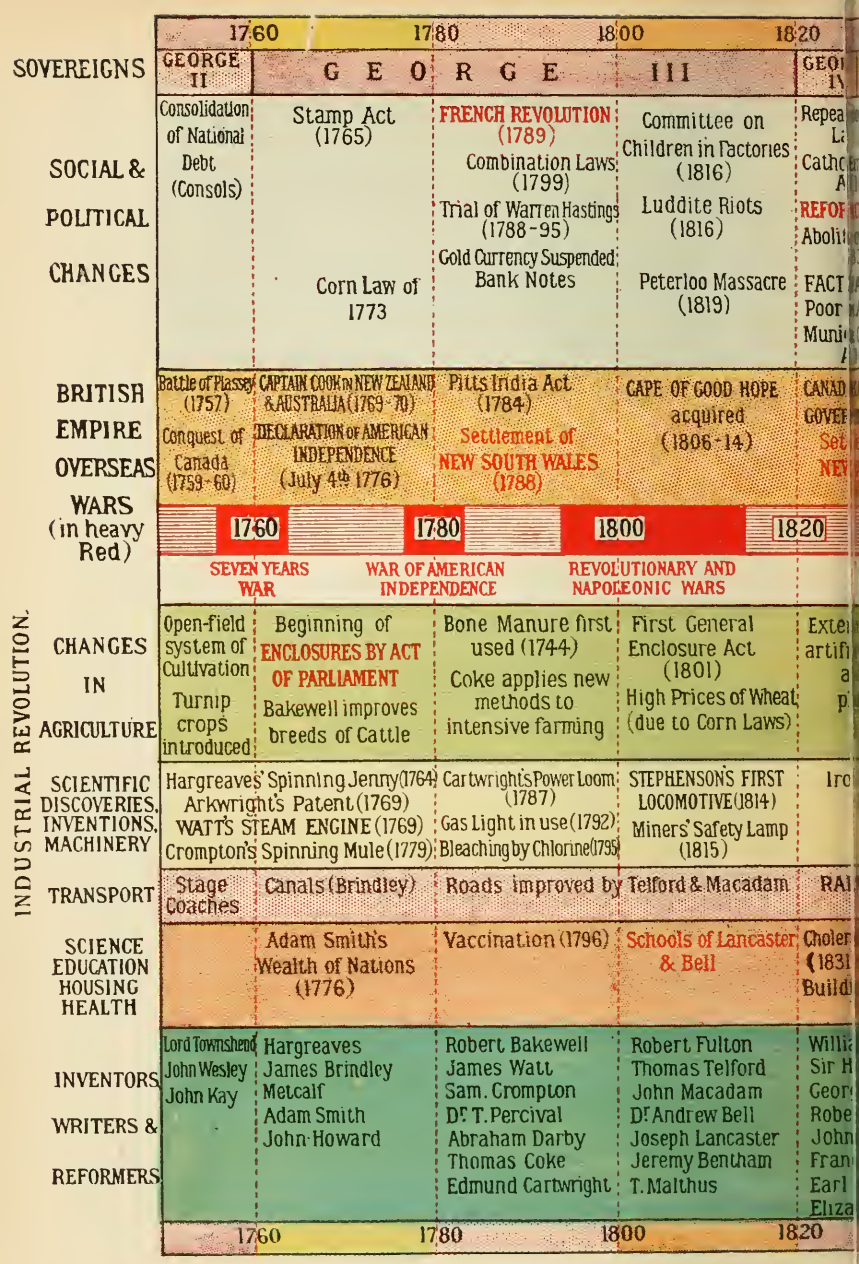


CHART ILLUSTRATING THE HISTORY

1840	1860	1880	1900	1920
WILLIAM IV	V I C T O R I A		EDWARD VII	GEORGE V
ibination 324)	CORN LAWS REPEALED (1861)	Paper Duty Abolished (1861)	THIRD REFORM ACT (1884)	Education Act (1902)	Irish
ncipation 29)	Failure of the Chartists (1848)	SECOND REFORM ACT (1867)	Gladstone's Home Rule Bill defeated (1886)	Workmen's Compensation Act (1906)	Free
(1832)	Public Health Act (1870)	EDUCATION ACT (1870)		Trades Disputes Act (1906)	State
Slavery 3)	Co-operative Society formed (1844-50)	TRADE UNION ACT (1871)		OLD AGE PENSIONS (1909)	created
T (1833)		Ballot Act (1872)		FOURTH REFORM ACT Votes for Women (1919)	(1922)
ct (1834)				Fisher Education Act (1918)	
rporation 35)					
NS SELF- (1838)	Natal (1843)	DOMINION OF CANADA established (1867)	Upper Burma (1886)	COMMONWEALTH OF AUSTRALIA (1909)	
t of	INDIAN MUTINY (1857)		Rhodesia (1889)	UNION OF S. AFRICA (1910)	
AND	East India Company dissolved (1858)	Zululand (1879)	Sudan (1898)		

1840	1860	1880	1900	1920
CHINA & SIKH WARS	CRIMEAN WAR INDIAN MUTINY	ZULU, EGYPTIAN & BOER WARS	AFRICAN WARS	GREAT WAR

se of anures ep ng	Failure of Irish Potato crop (1845) Improved Agricultural Machines Steam ploughs and threshers in use	Agricultural Holdings Act gives security to Tenants for Improvements (1875) IMPORTATION OF MEAT	Allotments Act (1887) Small Holdings Act (1892)	Corn Production Act (1917)
ps	ELECTRIC TELEGRAPHS	Electric Light Bell's Telephone (1877)	Daimler's Petrol Engine (1884)	WIRELESS TELEGRAPHY	Radio
S & STEAMSHIPS		STREET TRAMWAYS	Electric Cars, Motor Cars, Aeroplanes & Airships		
emics 54) ieties Act 6)	Great Exhibition (1851) Darwin's "Origin of Species" (1859)	Public Elementary Schools	X Rays (1896) Radium (1896-1910) Antiseptic Surgery Lister	Compulsory Health Insurance for workers (1911) Ministry of Health established (1919)	
bett bhenson en n ce Fry	Sir Robert Peel Lord John Russell Thomas Carlyle Richard Cobden John Bright Charles Dickens Charles Darwin Lord Shaftesbury	J. S. Mill W. E. Gladstone Thomas Hughes Joseph Arch Charles Kingsley Robert Browning Florence Nightingale Lord Lister		Thomas Burt Lord Kelvin	

1840	1860	1880	1900	1920

THE TOLL-GATES AT PICCADILLY, LONDON, IN 1797.

Tolls were levied at many places on the main roads, to pay for keeping them in repair. The picture shows the condition of the road at Hyde Park Corner before the new methods of road-making and macadamizing had been devised. The driver of the stage-coach in the foreground must have found it difficult to avoid the ruts.

CHAPTER IV

PARLIAMENTARY ENCLOSURES

SO far we have spoken only of the manors in which enclosure was by agreement. On hundreds of manors little or no attempt was made to secure agreement; the lord of the manor went direct to Parliament to secure an Enclosure Act, and, unless petitions signed by a certain proportion of the holders were presented to Parliament, permission to enclose was usually granted. Here is a typical petition of the year 1797:

A PETITION AGAINST ENCLOSURE, 1797

"*A Petition of the hereunder-signed small Proprietors of Land and Persons entitled to Rights of Common (at Raunds, Northamptonshire)*

"That the petitioners beg leave to represent to the House that, under the pretence of improving lands in the same parish, the cottagers and other persons entitled to right of common on the lands intended to be enclosed, will be deprived of an inestimable privilege, which they now enjoy, of turning a certain number of the cows, calves, and sheep, on and over the said lands; a privilege that enables them not only to maintain themselves and their families in the depth

of winter, when they cannot, even for their money, obtain from the occupiers of other lands the smallest portion of milk or whey for such necessary purpose; but, in addition to this, they can now supply the grazier with young or lean stock at a reasonable price, to fatten and bring to market at a more moderate rate for general consumption, which they conceive to be the most rational and effectual way of establishing public plenty and cheapness of provision; and they further conceive, that a more ruinous effect of this enclosure will be the almost total depopulation of their town, now filled with bold and hardy husbandmen, from among whom, and the inhabitants of other open parishes, the nation has hitherto derived its greatest strength and glory, in the supply of its fleets and armies; and driving them, from necessity and want of employ, in vast crowds, into manufacturing towns, where the very nature of their employment, over the loom or the forge, soon may waste their strength, and consequently debilitate their posterity, and by imperceptible degrees obliterate that great principle of obedience to the Laws of God and their country, which forms the character of the simple and artless villagers, more equally distributed through the open counties, and on which so much depends the good order and government of the State. These are some of the injuries to themselves as individuals, and of the ill consequences to the public, which the petitioners conceive will follow from this, as they have already done from many enclosures, but which they did not think they were entitled to lay before the House (the constitutional patron and protector of the poor) until it

unhappily came to their own lot to be exposed to them through the Bill now pending."

Even if petitions *were* presented they generally carried little weight; the lord had only to argue that enclosure was for the benefit of agriculture, and the Act was granted. The procedure then was much the same as in enclosures by consent; commissioners were appointed under the Act to survey, assess, and reallot the holdings.

Their expenses, as well as the costs of fencing, ditching, and draining, were apportioned amongst the holders. The results, again, were much the same for the small holders and probably worse for the squatters, or those who could not prove their legal right to a holding.

The extent to which enclosure went on is illustrated by the fact that from 1750 to 1810 Parliament passed 2,921 Enclosure Acts. Those passed in the years 1760–96 enclosed over 2,800,000 acres.

The general result was to make more and more families dependent either on day labour or on manufacture. If the latter were resorted to, then it was necessary for the family to move sooner or later to a town or to the northern counties. For, as the great textile industries developed in the new factories of Lancashire and Yorkshire, the primitive organisation of the domestic system broke down in the southern, western, and eastern districts. It became more and

more difficult for cottage workers either to get wool to spin, or to market their yarn.

The capitalists, who for centuries had acted either as middlemen or wholesalers, found greater opportunities in the North. The great wool and cloth markets of the Cotswolds, the West of England, of East Anglia, rapidly declined in importance. To realise the decline a visit to the beautiful old-world towns of the Cotswolds is well worth while: the picturesque old cloth-hall of Chipping Campden, the charming old mansions, the lovely churches, all speak of a prosperity long passed away, a prosperity that moved along with many of the inhabitants to the smoky, ugly, crowded towns of Lancashire and Yorkshire.

The following passages from "The Annals of a Quiet Valley," by John Watson, illustrate how different life was in those days in a remote Westmorland parish. The extracts describe the life of the clergyman of the parish. Compare it with the life of a modern clergyman! And although probably parsons in the northern dales were a very different type of man from those in the more developed southern and western counties, the wide contrast is very valuable, even though our Westmorland divine may have been exceptional.

In fact, as much of the literature of the time shows, many parsons were mere hangers-on in the houses of the richer landlords and squires; the Church as a whole had become slack; the qualifications for becoming a parson were absurdly low, and many clergymen did

little or nothing but conduct a weekly service and perhaps read prayers at the "Hall."

Of course there were, as there always have been, many good earnest men in the Church; many men, who if they did not work as Mr. Watson did, were yet a wholesome and kindly influence in their respective parishes.

"My grandfather I have only as yet casually mentioned. He was born in 1719, and, being the youngest of twelve, and sickly, was, according to custom, bred a scholar. His 'living' amounted to £43; but this he eked out in many ways—all of them honest, if not dignified. He tilled the glebe, laboured for the neighbouring farmers, spun and knitted the wool of his herdwicks [a breed of sheep], made wills, and conducted the limited correspondence of the whole parish. On the 'lot' near to where we were bred was a small mere which contained grey trout and char, and I have heard it said that my grandfather taught the people to net the tarn, receiving by way of toll a halfpenny for each draught of fishes.

"In addition to these offices, he added to his glebe a portion of ground which he rented, and did all the drudgery its work demanded. He also reclaimed a patch of mountain ground, kept a couple of cows, and had right of pasturage on the common for a flock of fell sheep. At busy times, of washing the sheep in the fell becks, of shearing, and of haymaking, he went out to assist his neighbours, and in this way added to his income 'in kind.' Those of his parishioners who lived nearest gave a certain quantity of hay for each day of

labour, while those further away contributed fleeces. The collection of these was left to the least busy part of the year; and in my grandfather's excursions among the hills he was always accompanied by an old white galloway (pony), upon whose back the fleeces were carried crosswise in panniers. In all these matters in which he assisted, the old clergyman was more dexterous than his neighbours."

Can you imagine a modern rector collecting hay and fleeces ?

"For the most part, however, he was charitably disposed, though in spite of this his economy was as wonderful as his industry. He supplied messes of broth to those who came to attend service from a distance on Sundays, and he sold them ale. In this matter he discriminated as follows: That which was drunk in the vestry was charged at the rate of 4*d.* a quart, whilst the same swallowed on the road or in the churchyard was only 3*d.* This selling of ale may seem a strange inconsistency to the leading of a godly life, but the ale entailed much honest labour in the brewing, and the demand for it was, maybe, owing to some extent to the isolation of the mountain district. But all the quaintnesses of my grandfather came to an end in 1812, for in this year he died at the age of ninety-three, having lived among the same people for sixty-six years. He left behind him £2,000, besides a large quantity of linen and woollen cloth, *all of which was made during his teaching hours within the Communion rails of his little church.*"

The words in italics show perhaps the most striking difference between those days and ours.

"Here is a picture of the old man written by one who visited him at his house during his lifetime, and I am told it is a faithful one: 'I found him sitting at the head of a large square table, such as is commonly used in this country by the lower class of people, dressed in a coarse blue frock trimmed with black horn buttons, a checked shirt, a leathern strap about his neck for a stock, a coarse apron, and a pair of great wooden-soled shoes plated with iron to preserve them, with a child upon his knee, eating his breakfast. His wife and the remainder of his children were some of them engaged in waiting upon the others, the rest in teasing and spinning wool, at which trade he is a great proficient; and, moreover, when it is made ready for sale he will lay it by 16 lb. or 32 lb. weight on his back, and on foot, seven or eight miles, will carry it to market, even in the depth of winter."

In other words, this parson actually lived the life of his parishioners, but lived it better and more wisely. Exactly like Chaucer's poor parson 500 years earlier still—

"Christ's lore he taught, but first he practised it himself."

"The living of 1780 presented a striking contrast with that of to-day. The tracks of the pack-horses were difficult for travellers at all times, and as a rule they were ill kept. Personal intercourse with the southern portions of the country was then difficult.

We speak lightly now of the will-making of our forefathers before starting on a long journey, but to them this was a matter of no small importance, and those whose business took them from home settled their worldly affairs before starting. Many of these were small manufacturers of woollen goods, having small mills on the mountain streams. Their goods they sometimes travelled to sell, conveying their merchandise on the backs of pack-horses. With the macadamised roads the string of pack-horses began to decline, and post-chaises were introduced.

" Soon after this carriers' carts and wagons came in, and a tale began to be told in the dales by one who had seen it, that a stage coach had begun to run from Edinburgh to London, passing the foot of this valley on its way; and the marvellous part of the story was that this ' flying machine ' took but fourteen days for the journey! Older people shook their heads doubtfully at the enterprise, and some of the learned doctors warned people from travelling by the wild and whirling vehicle, as the rate at which it went would bring upon them all manner of strange disorders, chief among which was apoplexy.

" This was only the beginning, however, of many and rapid changes. Then, spinning wheels were in every hill farm, and the cloth which the dalesfolk wore was homespun. Outside the domestic circle a few handloom weavers wove cloth of duffle grey for the men and russet for the use of women. Finer wool for finer work was carefully combed within the settle nook, but almost all for domestic use. The woolcomber was a great man in those days; and the itinerant who

THE VICAR OF WAKEFIELD'S FAMILY GOING TO CHURCH.
(From an early 19th century mezzotint.)

INTERIOR OF A COTTAGE ABOUT 1760.

A COTTAGE AT THE BEGINNING OF THE 19TH CENTURY.
(*Painted by Sir David Wilkie in 1808.*)

tramped the country and turned wooden dishes and such-like articles was always received kindly. These men were the news-carriers of the times, and it was from among them, some years later, that our neighbour, Mr. Wordsworth, drew the character of his immortal 'Wanderer.' The produce of the flax-field yielded material for holiday attire, and it was in great request among women.

"In those days the travelling tailor went from house to house in search of employment, and in the larger of them was sometimes detained for weeks. He worked for daily wages, and amply paid for his meat and drink by the news he brought. Although the home produce was large, money was scarce, and the earnings of the servants were paid 'in kind.' The girls received shifts and gowns and aprons; the men shirts and coats, with sometimes a little wool and corn.

"In money the annual wages of a man-servant would have been about £5, of a woman £2. In our old hill church there is a fine mural monument to Dame Cylpine, of the Hall. I have before me an account of 'the holle yeare waigs of all her servants at S——,' and these amount to 290*s.* for eight men and nine 'maydes.'

"In the days of Dame Cylpine (about fifty years before the time of which I am speaking) a thorough knowledge of domestic art was considered necessary to fit a lady for the duties of wife and mother. Where one woman can knit a pair of stockings now there were a hundred then, though in the matters of music and philosophy the proportion is reversed.

What, then, did these people eat?

"As yet the art of fattening cattle was but little understood, and the first experiments were tried on sheep in winter. This raised great hopes in the minds of breeders, for as yet the winter supply of animal food had proved wholly inadequate. The stock which was fed in autumn was killed off by Christmas, and, with the exception of veal, scarcely any fresh meat appeared in the markets before the ensuing midsummer. This dearth the more substantial yeomen and manufacturers provided against by curing a quantity of beef at Martinmas, part of which was pickled in brine, the rest dried in the smoke of the capacious chimneys.

"On Sundays the farmers' wives boiled a huge piece of meat from the brine-tub, which on that day was served hot. From that day as long as the joint lasted it came up cold, relish being given to it by the addition of oatmeal pudding. Hogs were slaughtered in great numbers between Christmas and Candlemas, the flesh being converted into bacon, which, with dried beef and mutton, afforded a change in spring.

"The only fresh provisions of winter consisted of eggs, poultry, geese, and ill-fed veal, the calves being then carried to market when two or three weeks old. In some of the northern rivers salmon was very abundant, and sold at twopence a pound."

Notice that there is no mention of vegetables and that there is little but salt meat in winter.

"At the time of which I speak the internal communication of the northern counties was bad indeed. The roads were so narrow that only pack-horses could

travel along them, and in this way the meagre traffic of the dales was conducted. Carriage roads there were none, and it was probably owing to this fact that, just as the yeomen spun their own wool, so they grew sufficient grain to last them through the year. Marks of the plough are often to be seen on the commons and moorlands; and in these marks may be read one reason of the rapid decline of the statesman [1] class.

"About the beginning of the present century thousands of acres of the lower-lying commons were enclosed. The continental wars then raging had sent up all kinds of grain to a price unknown before. The yeoman reaped a rich harvest; fresh land was broken up, and some of it yielded enormously. Every available bit of land was ploughed, and corn crop after corn crop was taken off."

The narrowness of their lives compared with those of modern workers is very marked. To-day we have daily illustrated papers; few farm-houses are more than four or five miles from a railway station or more than ten miles from a picture palace.

"The life of the fell folk must have been very lonely in winter. They rose and went to bed with the sun, their only artificial lights being made from rushes and

[1] Statesmen: a local name in Cumberland for the owners of small estates, i.e. estatesmen; famous for sturdy independence. They usually held their estates according to the old customs of the manors, and often paid, in addition to a money rent, services and other dues. In 1794 about two-thirds of Cumberland was held in this way, the estates rarely being worth more than £15 to £30 a year rental.

mutton fat. Among the *shippons*[1] in winter the candles were carried in old-fashioned horn lanterns, which were manufactured by themselves. There were no markets for their milk and butter, and so the former was converted into cheese, mostly of a very low quality. At this period the labouring classes were badly housed; they subsisted chiefly on porridge of oatmeal, or dressed barley boiled in milk, with the addition of meal-bread, butter, and a very small quantity of salted meat. This diet told terribly upon the poorer population in spring; for ague set in with painful regularity.

"As the culture of esculent vegetables became more common, however, salted provisions fell into disrepute, and potatoes began to be generally though sparingly used. The cultivation of this root told healthily upon the inhabitants, and made them much better off than when they were wholly dependent upon grain. As the use and virtues of tea, then a foreign luxury, became better understood, neatly turned cups and saucers of wood made their appearance, these being commonly used instead of porcelain. . . . At the beginning of the century wheat was never seen in the cottage of the northern labourer, and but rarely made its appearance on the table of the middle classes. Frugal housewives evinced their attachment to economy even on these occasions by making their pastry of barley meal, which they veneered with a thin cake of flour."

What housing conditions were like is illustrated by the next extract. It must be remembered that in

[1] *Shippon:* a house or shed for cattle or sheep; a stable.

this case, at any rate, the description is not exceptional; it is an account of the ordinary North-country cottage of a hundred years ago. Even the shocking rows of cottages in our towns of Northern England are better in some ways.

"Perhaps the best idea of the early fell folk may be had by looking at their domestic life. And in this connection it must be said that their houses were ill-contrived and hardly in keeping with modern notions of decency. The water supply was of course indispensable, but, instead of digging a well or conducting water to the houses, the homesteads were invariably built by the sides of the fell becks.

"Consequently, many of them stood in damp situations, and occasionally in autumn foaming torrents tore up the folds and washed away the out-buildings. These, like the houses, were low; a man of ordinary height could not pass the lintel without stooping. The floors were below the level of the ground without, and entrance was made by a descent of one or two steps. The basement was divided into three apartments: the 'buttery,' which formed the general larder; the common hall, or kitchen, which formed the living-room; and a slightly raised chamber, in which the master and mistress slept. The whole was either rudely paved with cobbles from the river bed or had a floor of flattened loam.

"There was no fire-grate, nor is there yet in many of the farm-houses of the mountain dales, and the peat or wood fire was laid on the hearth. The fires were 'raked' at night, and some are known never to have

been extinguished for half a century. 'Raking' was easier than having to rekindle the fuel with the aid of a flint and a steel, and was the universal practice.

"The chimney place was one in which a cart might have been driven, being 12 feet or more in width, and open in front. In the funnel were hung joints of beef, mutton, and pork, while sometimes a dozen hams were smoking in the chimney. A long and sooty chain ending in a crook went up from the fire to a beam above, and this bore the heavy iron pans of the period. Many of these were supplied with a funnel by which to let the steam escape; and, as there was nothing in the shape of ovens, all food was cooked by their aid.

"At every season of the year streams of sooty water trickled down the wide chimneys; and the members of the household sat and went about their duties with covered heads. In other instances the second storey of the house, called the loft, was open to the rafters, and constituted the sleeping apartment of the women and children.

"In most cases there was but one chamber undivided by partitions; and here the dependents were lodged —the men at one end, the women at the other, as already mentioned. Beyond a rope stretched across, upon which coats and gowns, articles of male and female attire, were hung promiscuously—there was no division whatever. In the houses of some of the statesmen of the provincial towns, where the custom was to provide lodgings for journeymen as well as apprentices, matters were even worse.

"The furniture of these northern homes was both rude in design and execution, but it was useful and

homely, and eminently in keeping with the houses that contained it. Almost everything was of wood, pegs of the same substance invariably supplying the place of nails. Wooden latchets were fixed to doors and gates; indeed, iron was almost unknown in domestic architecture. One great feature of the country houses was their arks and chests. These were curiously and quaintly carved, with carvings 'all made out of the carver's brain.' Coleridge lived in a district where the work of the home-bred carver was everywhere to be seen, and doubtless the above line in 'Christabel' was so suggested. In the arks were kept oaten cake, malt, preserves, and dried meats, old 'china,' pieces of dress material in flowered silk and satin, and a few pieces of plate—family heirlooms.

"The huge bedsteads in use were of massive oak, with testers of the same material. The chairs were generally made of clumsy wainscot, but some of them were fashioned from the trunks of hollow trees—the carpenter completing what time had begun. For table, there stood in the common hall a board of from three to five yards in length; this rustic board being furnished with forms or benches along its sides. Upon these the family and its guests were seated at meal-times. Maple trenchers supplied the place of plates, and liquids of every description, milk, broth, beer, were served in wooden vessels made with staves and hoops.

"Cold and wind, which freely found their way into the common hall by the chimney, as well as by the badly jointed doors and windows, were provided against by a screen placed in front of the turf fire. In the centre of the hearth stood a square upright staff,

having a row of holes along one of its sides, and its lower end fixed in a log of wood. This simple contrivance supported the candlestick, which was thrust at a convenient height into one of the holes. In the warm though smoky retreat of the settle-nook the family spent the long winter evenings in knitting, spinning flax, combing wool, and in other home industries.

"The conversation at such times, especially that of the elders, had one result, in perpetuating the credulity of the times. The talk constantly turned upon apparitions, omens, workers in witchcraft, and more innocent fairy tales. But at the beginning of a new era these things obtained less countenance, and a general change began. Provincial newspapers were started, and wonderfully enlarged the narrow world of country readers.

"Innovation came steadily from the south, and the rude artisans were ousted. Old handicrafts were subdivided; the cabinet-maker invaded the province of the carpenter, the worker in metals that of the makers of wooden platters, and the great army of itinerants rapidly declined."

To people of to-day who work a fixed number of hours per day, who have little or no interest (beyond self-respect) in doing good work, who may buy food and clothing in great variety—the food ready cooked, the clothing all ready made if they wish—these extracts describing the life of English countryfolk a hundred years ago read more like the pages of some romance dealing with a foreign semi-barbarous land.

That the conditions were little if any better in the south-western districts is shown by these two extracts from W. Cobbett's "Rural Rides," a book in which he describes what he sees as he travels about England, much as Defoe did nearly a century earlier.

"MARLBOROUGH, *November* 6, 1821.

"The labourers along here seem very poor indeed. Farmhouses with twenty ricks round each, besides those standing in the fields; pieces of wheat, 50, 60, or 100 acres in a piece; but a group of women labourers, who were attending the measurers to measure their reaping work, presented such an assemblage of rags as I never before saw, even among the hoppers of Farnham, many of whom are common beggars. I never before saw country people, and reapers, too, observe so miserable an appearance as these. There were some very pretty girls, but ragged as colts, and as pale as ashes. The day was cold, too, and frost hardly off the ground; and their blue arms and lips would have made any heart ache.

"CIRENCESTER, *November* 7.

"There is very little wood all along here. The labourers seem miserably poor. Their dwellings are little better than pig-beds, and their looks indicate that their food is not nearly equal to that of a pig. Their wretched hovels are stuck upon little bits of ground on the roadside where the space has been wider than the road demanded. In many places they have not two rods to a hovel. It seems as if they had been

swept off the fields by a hurricane and dropped and found shelter under the banks on the roadside! Yesterday morning was a sharp frost, and this had set the poor creatures to digging up their potatoes. In my whole life I never saw human wretchedness equal to this; no, not even amongst the free negroes in America, who, on an average, do not work one day out of four."

CHAPTER V

THE GAINS TO AGRICULTURE AND THE NATION

IT is of course easy to dwell on the dark side of the Agrarian Revolution; to picture the distress and anguish of the families of young and old uprooted from their ancestral homes, severed from their old relationships, cut off from the churchyard where the "rude forefathers of the hamlet sleep."

Nothing is easier than to write of the grave injustice done to thousands of innocent and worthy small holders, of the destruction of all that was best in the social life of those ancient open-field villages.

But while it is right and proper that we should give due weight to all these pitiful happenings, we must always remember that the Agrarian Revolution was very far from being all loss. The old methods of farming were primitive, wasteful, and unprogressive; the sheep and cattle were small, and prone to disease; the corn crops were barely one-third of what any average cornfield could have produced; there were no root crops or forage crops worth mentioning; there were no artificial manures.

The Revolution enabled farmers to breed strains of sheep, horses, and cattle that were, and still are, the envy of the world; breeds that have produced the

vast flocks of Australian sheep and the enormous herds of American cattle; breeds that are still sought by Colonial, Continental, and American farmers, who will pay thousands of pounds for a ram or a bull of these famous strains. The Revolution increased the yield of English arable land twofold, threefold, fourfold, and experiments are still proceeding to increase the yield still further.

This has been done in two main ways: either by attention to the soil, by draining, scientific manuring, lightening or stiffening, or by attention to seed. In the old days little attention was given to the selection of corn for seed, and poor seed of course produces poor crops. Every year crops were depleted by blight or "rust." But by careful selective breeding of seed larger crops can be produced, and, what is at least equally important, varieties have been bred that are immune from blight or "rust." In fact, the history of seed-corn during the past fifty years or so reads almost like a novel.

The Revolution, also, by making possible the growth on a large scale of root crops and forage crops like lucerne, clovers, and sainfoin enabled farmers to keep their sheep and cattle through the winter. Fresh meat, milk, and butter became therefore procurable in great quantities all the year round. The effect of this on the general health of the population can hardly be exaggerated. It also made dairy farming as much a winter as a spring and summer occupation; it re-

moved one of the chief needs for the Domestic System of Industry which had provided so much home-work for the winter months.

In other words, the Agrarian Revolution made farming a scientific industry requiring for success men of initiative, resource, self-reliance, with a knowledge of the chemistry of soils and manures, of the principles of selective breeding, of the nature of blights and pests, and their extermination. From being a merely customary occupation carried on in the ancestral way, farming became one of the most exacting and arduous of industries: so much so that even now there is far too large a proportion of farmers who are unprogressive, unscientific, and wasteful.

But there are still other considerations that have to be borne in mind. Without this vast increase in the quantity and variety of foods the rapidly growing population of England could not have been fed. The development of other industries, largely in towns, completely altered the proportion of people who produced food for themselves. Formerly most of the towns—London was of course an exception—depended almost entirely on food produced in the immediate neighbourhood and brought into the weekly or bi-weekly market. But those towns were small, like the Cotswold towns to-day, consisting of about 2,000 or 3,000 inhabitants; and many of the inhabitants produced some food for themselves in their gardens.

Happily, to supply food was therefore a comparatively simple matter, except in winter when vegetables, apart from dried peas and beans, were almost unobtainable, when only salted meats and dried fish were procurable, and then only at high prices. But the very rapid growth of the new industrial towns like Manchester, Birmingham, Leeds, Liverpool, and scores of other places altered all this. The workers in these towns were hardly ever producers of food; yet they had to be fed.

Therefore the conditions and the methods which hitherto had applied only to London had to be developed rapidly in order to feed the people crowding into the industrial areas. Food had to be brought in, often from long distances. Thus the old roads, already in a wretched state, deeply rutted and seldom repaired, became still more dangerous, still more crowded. Herds of cattle and pigs, flocks of sheep, wagons, horsemen, foot-passengers—men, women, and children—industrious, idle, or feeble—jostled slowly and laboriously along in the main tracks towards the centres of industry. Hence came the greater need for imported foods; in other words, the need for the development of our Colonial Empire from which to get corn, tea, sugar, as well as the raw materials for industry.

Without the Agrarian Revolution thousands of the poorer classes would undoubtedly have died of starvation during the later years of the eighteenth century and the first twenty or thirty years of the nineteenth

century. Famines such as devastated Russia in the years following the Great European War (1914–18) would almost certainly have followed the Revolutionary and Napoleonic wars.

Even *with* this Agrarian Revolution many thousands of the poor in England were hungry and destitute year after year, and the death-rate was very high, especially of children under five years of age.

This was partly owing to the Napoleonic wars, partly to the policy adopted by the Government of keeping out by means of the Corn Laws foreign wheat until English wheat had reached a certain price (80*s.* a quarter). It was also partly owing to the actual shortage of supplies, and partly owing to the breakdown of the old methods of distribution.

The following list of wheat prices shows what a terrible struggle the heads of families must have had to feed their families when a home-weaver's weekly wages were under 15*s.*, as they usually were.

1800 British wheat reached 141·5*s.* per quarter; the 4-lb. loaf averaged 15·3*d.*

1801 British wheat reached 161·2*s.* per quarter; the 4-lb. loaf averaged 15·5*d.*

1805 British wheat reached 103·5*s.* per quarter; the 4-lb. loaf averaged 13·1*d.*

1809 British wheat reached 113*s.* per quarter; the 4-lb. loaf averaged 13·7*d.*

1812 British wheat reached 160*s.* per quarter; the 4-lb. loaf averaged 17·0*d*

In our own time during the Great European War (1914–18), when few men were earning less than £3

or £4 per week, we thought it a great hardship to pay 1*s.* for a 4-lb. loaf! It would have cost us much more than it did had not our Government paid part of the cost of it so that the loaf might be sold at less than its cost.

But the importance of the enclosure movement and of the improved methods of farming is now evident. It is clear that reforms in agriculture were closely related to many other important developments; the chief of these are (1) the growth of large-scale production in industry; (2) the growth of the Empire; (3) the growth of better methods of transport; (4) the rise of a large wage-earning class dependent on a few capitalists.

MOUTH OF A COAL PIT AT BROSELEY, SHROPSHIRE.
From an engraving published in 1788.)

INTERIOR OF SMELTING WORKS AT BROSELEY, SHROPSHIRE.
(*From an engraving published in 1788.*)

VIEW OF THE IRONWORKS AT COALBROOKDALE IN 1758.
(From an engraving published in that year.)

CHAPTER VI

MEN AND MACHINES

UNDER the Domestic System the processes of preparing wool, spinning yarns from it, making cloth from the yarn, and dyeing and finishing the cloth were all carried out with very simple appliances and machines. A comb and a board stuck full of nails or spikes played a large part in the preparation of the wool. From time immemorial the spindle and distaff had been used for spinning a thread; the simple spinning-wheel with a treadle took its place; the wheel with two or three spindles was a later improvement. Spinning-wheels were in common use within living memory in Wales, the Isle of Man, and West Scotland. The full daily produce of six or seven wheels was necessary to keep one weaver occupied.

The loom at which the weaver worked was quite simple in structure. Primitive looms of the same types are still used in oriental countries. It should also be emphasised that they were in use almost solely for wool. For centuries the trade in wool, in yarn, in cloths, had been the staple trade of England; it had been the chief source of wealth from the twelfth century on-

wards. Linen was in fairly common use; so were cloths half linen and half wool. Cotton had been used in England since the later years of the sixteenth century, but made up with linen or wool. We know this from a petition to Parliament dated 1621 from certain merchants who say, "About twenty years past divers people in this kingdom, but chiefly in the county of Lancaster, have found out the trade of making of the fustians, made of a kind of bombast or down, being a fruit of the earth growing upon little shrubs or bushes, brought into this kingdom by the Turkey merchants from Smyrna, Cyprus, Acra and Sydon, but commonly called cotton-wool." This, when woven with linen, or wool one way and cotton the other, produced fustians. Another writer in 1641 tells us that "the Levant or Turkey Company brings great quantity of cotton and of cotton yarn into England." Before the year 1700 the annual import of cotton-wool was nearly 2,000,000 lbs. and was being made up into friezes, fustians, sack-cloths, mingled stuffs, caps, tapes, lace, etc. Later on, when the use of cotton goods began to grow, the Government of that time stepped in and passed laws forbidding the use of articles made entirely of cotton, for fear the wool trade might be damaged. But when it was found that there was a big demand for cotton goods in foreign and colonial markets; that raw cotton could be imported, made up here, and sold at high profits in other countries, especially in India, then the manufacture of cotton goods

was allowed, because it provided a new source of national wealth.

It was in the development of this new industry that inventive genius played a very great part. The old appliances continued to be used for wool long after the machines had been adopted for the bulk of the cotton manufacture. In the case of cotton, a new industry, there was no dead weight of tradition and age-long custom to overcome. It should be observed that these simple machines were made almost entirely of wood—metal played a very small part in them.

For centuries they had changed very little in construction; but in 1733 a man named Kay invented what was called the "flying shuttle." At each end of the shed-warp he constructed a shuttle-box which contained a hammer. Each hammer in turn knocked the shuttle containing the weft along the shed into the opposite shuttle-box as the treadles raised first one heald and then the other. This was a much quicker process than passing the shuttle on a stick from side to side. Moreover, the width of the cloth which could be woven had previously been limited by the stretch of a man's arm. But Kay's invention enabled much wider cloth to be woven.

The pressure on the spinners of yarn had already been severe. It was quite common for weavers to be idle for lack of yarn. Kay's invention made matters worse; and it was not until Hargreaves, over thirty years later, produced his spinning-jenny that the

balance was restored. By this machine eight threads could be spun at once, and before long sixty or more at once, by one operator.

Arkwright, in 1769, adapting an earlier invention, produced a machine in which the carded cotton passed through a series of pairs of rollers, each pair of which revolved faster than the last, so that the thread became finer and finer, ready for spinning. This machine was driven by horses at first. But in 1771 a large mill was erected at Cromford in Derbyshire; this was driven by water-power, much as the old corn-mills had been by means of a water-wheel. Within twenty years or so many mills containing these machines had been erected in Lancashire, some driven by horses, some by water-wheels, some by steam-engines which had been recently invented by James Watt.

In the meantime Samuel Crompton had improved on Hargreaves' jenny: he had produced what was called a mule (1799). These machines also were driven by horse, water, or steam.

The spinners now were far ahead, and producing yarn more rapidly than it could be used. Fortunately, improved looms were soon invented. Cartwright invented a power-loom in 1787; and in 1789 his looms were being worked by steam-engines. But the use of power-looms did not develop as rapidly as did the use of spinning-machines driven by power until well on into the nineteenth century. This was partly owing to the increasing number of hand-loom weavers; and this

again was a consequence of the enclosure movement, which compelled a larger number of rural workers to depend more and more on weaving at home.

Other inventions, like the use of chlorine, and later, chloride of lime for bleaching (1795); the machine called the cotton-gin (1792) for removing the seeds from raw cotton; the use of rollers or wheels for printing a continuous pattern on cotton cloth (1783), all stimulated the use of machinery for the cotton industry. And by slow degrees, but at an ever-increasing rate, the machines began to displace hand labour in the old established woollen industry also.

Such, then, are the main facts about the inventions. But historical facts are worth little unless one realises their consequences and their significance to the people affected by them.

To begin with, we must recall that most of the machines were made almost entirely of wood at first. But even the making of these machines created a greatly increased demand for brass, and particularly for iron.

Step by step iron came to play a larger and still larger part in the making of machines. Wood was neither strong enough nor reliable enough. To-day most of the machines used in any industry are made almost entirely of iron. Even agriculture is to-day carried on almost entirely with iron implements, yet two hundred years ago most of the implements were of wood. Even the ploughs were made of wood,

except perhaps for the edge of the share. Think of the enormous stimulus these inventions gave to the iron trade of the eighteenth century. New sources of iron ore had to be found; the old sources were being worked to the utmost. New methods of smelting iron had to be discovered, as well as new methods of preparing it for its different uses.

Previously all iron had been smelted by means of charcoal. To get charcoal our forests were being destroyed, and there was a great shortage of timber for all purposes. Fortunately it was discovered by Darby at Coalbrookdale, whose invention was improved upon by Smeaton at the Carron Iron Works (1760), that good iron could be produced if the ore were smelted with coal and lime. Thus the blast furnace was invented, and the various processes for refining iron followed. The discoveries of Henry Cort enabled 15 tons of iron to be turned out in the time formerly taken for one ton. Soon in the Black Country, on Tees-side, in Derbyshire, in Yorkshire, in South Wales, great furnaces were built on the coalfields, where new towns sprang up.

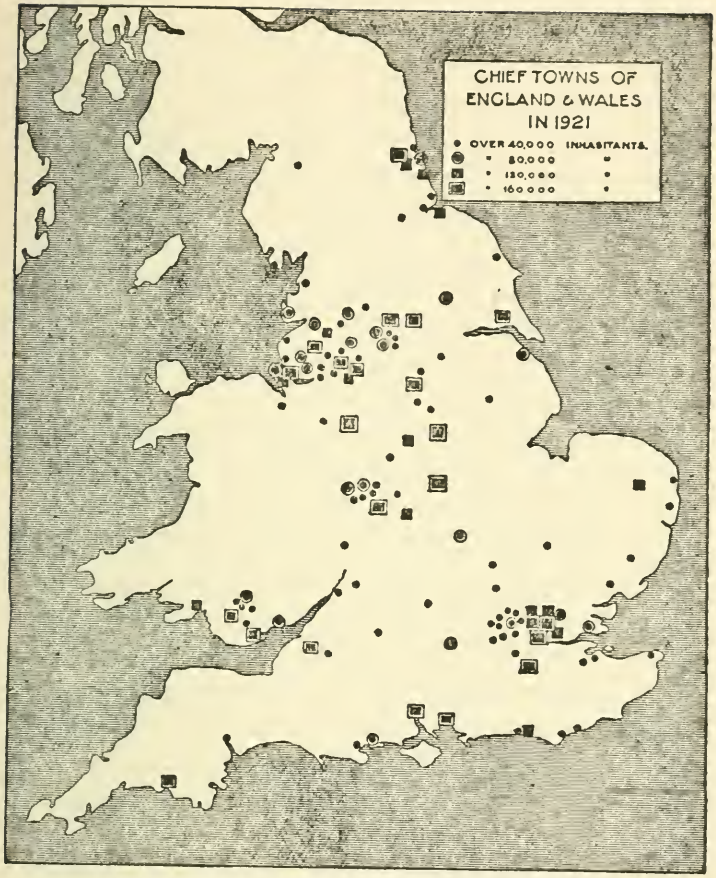
But Smeaton's discovery meant that the coal output of England was no longer anything like adequate. For many centuries coal had been worked on Tyneside and shipped to London; in Staffordshire, Lancashire, and Yorkshire it had long been used as a domestic fuel obtained from shallow surface workings. Now much more was needed if the necessary iron was

to be produced for the machines and the engines to drive them. Hence there followed an enormous growth in the number of pits opened wherever there were coal-fields.

More inventions were needed to enable the pits to be sunk to lower levels ; to get the coal up and down ; to ventilate the mines. Another increase in the demand for iron as well as coal ! As a result we get to-day the thickly populated mining districts of England, all producing coal mainly for industrial purposes at the rate of about five million tons a week. In the same way, though on a smaller scale, we get a great development of quarrying in the limestone districts so that the iron furnaces may be supplied with a necessary ingredient.

But something else was also involved. The coal and iron had to be transported from the pits and furnaces to where they were needed. If the sea could be used so much the better, since carriage by water was cheap. But what of the inland centres of industry ? Could carriage by water be used to supply them ? The Earl of Bridgewater, who owned coal-mines at Worsley near Manchester, thought it could ; so did his unlettered engineer, James Brindley, who planned and had constructed the first canal (1761) for industrial purposes ever built in England. It was seven miles long, and, to everybody's amazement, was carried on a viaduct 40 feet high over the river Irwell. Henceforth the factories of Manchester, as

"During the nineteenth century the population was quadrupled" (see p. 11). For this reason the population selected for comparison in the second map on the opposite page is, in each case, four times that in the above map.



See note below the map on the preceding page.

well as its houses, were supplied with water-borne coal at something like half its former price.

Before long England became a network of industrial canals. The Mersey was joined to the Trent, the Trent to the Severn, the Severn to the Thames, and even Lancashire to Yorkshire by canals. If only these early canals had been made wider and deeper (like the Manchester Ship Canal opened in 1894) they would have been vastly more useful to-day. In their own time, however, they were wonderful—they were used even for passengers.

But even canals were not enough. Improved roads were needed. The old custom of relying on each manor to keep its own roads in repair was hopelessly out of date. The imposition of tolls at bridges and at frequent places on the roads was costly and annoying, especially as the tolls were often not used to keep the roads and bridges in repair.

The growth of industry meant an enormous increase in the number of travellers on the roads, passing from centre to centre of trade; it meant also a vast increase in the number and weight of the wagons drawn laboriously from town to town, containing raw materials, finished goods, foods, and general merchandise, as well as coal and machines.

The old roads were bad beyond all powers of description. There had never been properly made roads since Roman days. Ruts two or three feet deep were common; foul mud was the least of their disadvantages;

gradients were often very steep and dangerous. Many of them were only pack-horse tracks roughly cobbled. It was urgently necessary that new methods of road construction should be found, and found they were by Metcalf (" blind Jack of Knaresborough "), by Telford (1757–1834), and by John Macadam (1756–1836). The experiments of these men produced durable, well-drained roads all over England. Except by the additional use of tar and a binding and surfacing material little change has been made since Macadam died.

But even this was not enough. Transport by road was slow, cumbrous, and uncertain. It was becoming more and more important that the supplies of food, of raw material, of coal, of general supplies should be swiftly, surely, and easily handled. So men began to cast about for other means of conveying heavy goods from place to place. The result of many inventions was the modern railway, towards the creation of which George Stephenson made the most important contribution by constructing (1825) the first railway from Shildon in Durham to Stockton-on-Tees to carry coal (which straightway fell in price from 18*s.* to 8*s.* a ton in Darlington). Just as there had been after Brindley's first canal " a canal craze," so now, after Stephenson's first railway, there came a railway mania, especially between 1840 and 1850. Everybody who had money to invest bought shares in the new railway companies and before long there were not many places in England more than a few miles from a railway station.

Yet another link in the great chain of circumstances must be noticed. Soon England became quite unable to supply from her own resources the ore she needed to make machines. Every invention seemed to increase enormously the demand for iron, as well as copper, tin, and zinc; every spinning and weaving machine constructed meant another call for cotton or wool; every new industrial town meant more workers to be fed who produced no food for themselves; and, as if to make matters worse, the population of England was increasing at a greater rate than had ever been thought possible. It was increasing so rapidly that even the careful philosophers became alarmed and predicted famine and the impossibility of one small country being able to clothe and feed so many people. A clever thinker named Malthus (1766–1834) was so concerned that he wrote a book about it and predicted disaster if the population went on increasing at the same rate. He was quite sure that only vice and misery could result from over-population, but he thought this danger was much nearer than we now know it to be. As long as our manufactures can buy food all over the world there is less pressure of population here than a hundred years ago.

It became more and more necessary to import food and raw materials from our colonies and from foreign lands. Thus, from the middle of the eighteenth century, shipping grew rapidly and enormously in importance. We needed ships, not only to bring us necessary

foods and raw materials, but also to take away our surplus manufactured goods. We needed colonies from which to buy foods and raw materials, and to which to sell our finished goods. Great wars like the Seven Years War were fought so that we might establish ourselves in Canada and India, because we could not develop without them.

The Napoleonic Wars became also a struggle for colonies, and from them dates the stabilisation of our power in South Africa and Australia. But wars meant, and still mean, a vastly increased demand for iron; and transport, whether by land or sea, needs still more iron. Thus we see that the development of our vast merchant shipping, and concurrently of our great navy to defend it, is closely bound up with the growth of our industries, and even with the progress of the enclosure movement.

Which is cause, which is effect, of all the many great factors mentioned it is perhaps impossible to say. But one thing, at any rate, is clear. It is not likely that in any fifty years of human history so many potent forces have converged upon one small country as were concentrated in England during the last quarter of the eighteenth century and the first quarter of the nineteenth.

CHAPTER VII

THE EFFECT ON THE PEOPLE

A VERY little reflection on the changes and developments outlined in the preceding chapter will reveal the conclusion that many thousands of people must have made their fortunes during the century or so after the year 1750. In some cases the inventors of new processes or appliances became rich. Unfortunately, too many of the inventors received little or no benefit from their inventions; either they lacked organising ability or business acumen.

More often it was the men who bought or financed the inventions—in other words, the men who provided the capital—who received the profit. Then, too, there were then, as now, thousands of men who, beginning in quite a small way, with perhaps two or three of the new machines in a cellar or shed, kept on adding to their equipment and their premises until they employed hundreds of men, women, and children.

Certainly within fifty or sixty years a large new class of men—wealthy manufacturers, foundry-owners, mine-owners, shipbuilders, contractors, middlemen—had arisen in England. They were largely self-made

men or the sons of self-made men, often lacking in education, in culture, in refinement, but men of great natural ability and strength of character. Some had been farmers, hand-workers, labourers; many were the sons of small shopkeepers in the old towns. A few belonged to the aristocratic families of great landholders who were not averse to gaining a share in the great profits obtainable by trading companies like the East India Company, or by opening up the coal or iron mines on their estates.

But, on the whole, the great new class of industrial and commercial magnates consisted of the newly rich: men born in humble cottages, but now aspiring to live in mansions and to ride in carriages; men who began to resent the fact that England was ruled by landowners; men who tried to become landowners so that they might be able, if not eligible to sit in Parliament, at least to control the votes of those who elected the members of Parliament.

Before 1830 these men had become a very powerful force in English politics. They claimed that it was industry and commerce that had saved England from Napoleon; that had financed the terrible wars; that had fed and clothed the armies, navies, and the people; that had won the colonies. They would argue, with a great deal of justice, that without such a huge expansion of trade and industry England would have been, if not utterly conquered, at least ruined; and with equal justice they could maintain that without their

resourcefulness, pushfulness, energy, and ability such an expansion of trade would not have taken place.

From this time onward there grew up a new governing class, competing with the land-holders for power, for the control of Parliament, so that trade might be fostered, encouraged, and developed; so that no obstacles should be placed in the way of the development of the nation's industrial resources. It was for the men of this class that the Reform Act of 1832 was passed. It was by and for these men that the Corn Laws were abolished and Free Trade established in England so that food might be cheap for the working classes.

It is therefore not unreasonable to argue that, just as the England of 1750 was what the great land-holders had made it, so the England of 1850 was what the great industrial magnates had made it. But, while saying such a thing, one must always remember the great forces, often beyond human control, that had produced the land-holders, as well as the captains of industry; they are both the product of centuries of slow and perhaps inevitable development.

But what had the emergence of this new class of capitalists produced in England? We have seen how the land-holders, under the pressure of events, had been driven to transform the English country-side from open field villages to compact, enclosed farms; we have seen how English agriculture benefited, as

MANCHESTER TWO CENTURIES AGO.

Photograph of a model constructed by Mr. H. Yates of Manchester, based on an exhaustive examination of old documents and prints. Reproduced by kind permission of the Corporation of the Royal Exchange Assurance Co.

OLD MARKET PLACE, MANCHESTER, ABOUT 1790.

(From a drawing in the Chetham Library, Manchester. Reproduced by kind permission of the Royal Exchange Assurance Co.)

well as farmers and landlords; we have seen large numbers of small men dispossessed and rendered, if not homeless, at least dependent on more or less casual labour.

What of the new industrial magnates? Apart from the enormous increase in national wealth produced by the Industrial Revolution, apart from the convenience of the new roads, canals, railways, and ships, what had they contributed to change the face of England and to alter the social life of its people? They themselves usually imitated as far as they were able the lives already led by the landed aristocracy. They bought old mansions. Large new mansions sprang up, especially in the northern and midland counties; more builders, decorators, gardeners, servants were wanted; more horses and carriages; more clubs, more theatres, more books.

Usually these new mansions were built within fairly easy distance of the mines, factories, or foundries. But, in addition, possibly the new gentleman took also a town house in the county town so that he might take a share in the government of the county or borough. Some had also houses in London, just as the old aristocrats always had. Think of the difference this would make to the traffic on the roads and to the demand for better roads, apart altogether from industrial needs.

Then, too, there had to be developed a new class of managers, foremen, clerks, and agents. For many of

these the best existing cottages were available; for others new ones had to be built.

For the hundreds or even thousands of "hands"—men, women, and children—accommodation had to be found somewhere. But most of the new factories for the manufacture of cotton and woollen goods, most of the new mines and foundries, were developed in districts where there were very few houses of any sort. There might be a small old-world village or two near by, but a factory or mine might employ a thousand workers. Even in places like Manchester the housing accommodation was always hopelessly insufficient.

Then, too, it must be remembered that the new developments were taking place almost entirely in the northern and midland counties on or near the coalfields. The dispossessed of the southern, western, and eastern counties were drifting in ever greater numbers northwards. For after a few years even the landworkers of these counties were being hard pressed; the best markets for wool were all in the North now; the cost of carrying either wool or yarn from, say, the Cotswolds to Yorkshire became a very serious addition when machines in Yorkshire were competing with hands in Oxfordshire.

It is easy to imagine what happened in every part of the country where the new industries developed. Every available cottage, cellar, barn, hovel, or shed was used to house the families working or seeking work. Regardless of decency, sanitation, health,

lucky the newly arrived family that could hire a dark cellar or a corner of a hay-loft, or even a cow-shed. Many of these people had to sleep—men, women, and children—in the factories, on the floors beside the machines. In such places they lived; in such places thousands of them died.

Of course, houses were built as fast as they could be run up: long, ugly rows of two or four-roomed cottages, often inconvenient and unhealthy, but perhaps a little better than the usual type of rural cottage. But, fast as they were built, the demand for them increased. Each four-roomed cottage had to house two or even three families. Is it any wonder that men, women, and children brought up under such conditions should often become brutalised, immoral, careless of decency, of cleanliness, of comfort? Certainly it is very wonderful that many of these homes were clean, decent, and wholesome, and produced thrifty, upright, self-respecting children.

But it must always be remembered that English people in the eighteenth century had very different standards of morality, decency, and cleanliness from ours. In those days soap was really a luxury, and was taxed as such. Coarseness, indecency, and brutality, such as to-day are quite uncommon, were in those days common enough and had always been. The following description by John Robertson, a surgeon, of the state of Manchester in 1840 shows what happened.

"Until twelve years ago there was no Paving and Sewering Act in any of the townships; even in the township of Manchester, containing in the year 1831 upwards of 142,000 inhabitants, this was the case; and the disgraceful condition of the streets and sewers on the invasion of the cholera you have no doubt learned from Dr. Kay's able and valuable pamphlet.

"New cottages, with or without cellars, huddled together row behind row, may be seen springing up in many parts, but especially in the township of Manchester, where the land is higher in price than the land for cottage sites in other townships is. With such proceedings as these the authorities cannot interfere. A cottage row may be badly drained, the streets may be full of pits, brimful of stagnant water, the receptacles of dead cats and dogs, yet no one may find fault. The number of cellar residences, you have probably learned from the papers published by the Manchester Statistical Society, is very great in all quarters of the town; and even in Hulme, a large portion of which consists of cottages recently erected, the same practice is continued. That it is an evil must be obvious on the slightest consideration, for how can a hole underground of from 12 to 15 feet square admit of ventilation so as to fit it for a human habitation?"

But the concentration of great numbers of poor people in the new villages intensified the characteristic vices of the time a hundredfold, and the effects of this dreadful overcrowding on the health and physique of

the young are still painfully evident in Lancashire and Yorkshire, where so large a proportion of the population, both old and young, even now are stunted, deformed, anæmic.

Then, too, from time immemorial it had been the rule for children to be made to work almost as soon as they could toddle. Working under the Domestic System, children had been very useful not only about the house, the farm, and the barns, but in helping to prepare the wool. What more natural and inevitable, therefore, that the same children should work in the factories? And especially in the cotton factories, where there was so much fetching and carrying to do of relatively light weights; where there were spindles, bobbins, and waste constantly to be collected from under the machines. Just the work for children in those days! Such, at any rate, was the common opinion.

So suitable, indeed, was the work thought to be for children that the supply of children ran short, and once again an old custom was extended and applied to new uses. For centuries pauper children (children whose parents were dead or could not be traced) had been kept by the parish in which they were born or became chargeable. Each parish was naturally anxious to get every child to work as soon as possible, and the children were therefore apprenticed to anybody who would undertake to train, clothe, and feed them for seven years. In some cases the children were well

and sometimes handsomely treated. But in many, if not most cases (as the story "Oliver Twist," by Charles Dickens, shows), little or no care was taken to safeguard the interests of such poor children. The great aim in too many cases was to relieve the parish of the cost of their keep.

Now the long series of great wars, the troubled times, the growing unrest and distress, had, as might be expected, rapidly increased the number of pauper children. Many of the northern manufacturers needed child labour. Why not take, under the pretence of apprenticing them, some of the hundreds of pauper children who were a burden on the London parishes, or on any parishes where it was at all difficult to find work for them? To many minds this seemed to be an excellent idea, a real benefit to everybody, including the children, who would then have a chance of becoming proficient in the new industries which were making such fortunes for so many people.

As a result it became a common practice to send young children aged seven years and upwards (and occasionally younger) in wagons from London and other places in the South to the factories in the North. It is not easy to picture the pitiful state of a wagon-load of little boys and girls huddled together, as the wagon was slowly dragged over the dreadful roads for a hundred and fifty or two hundred miles. At the factory there might possibly be a room in which they could sleep; there might be a decent woman to attend

to them ; the foreman and managers might be more than usually humane. But too often the only accommodation was in the factory beside the machines, perhaps on rough straw mattresses, perhaps on the bales of wool or cotton. There might possibly be for them a little religious teaching on Sundays.

It might even be possible for them to be taken for a walk on that day. But for the other six days they had to work, as the elders did, for fourteen or fifteen hours a day, Saturdays included. In this way they were trained to be industrious, to avoid the vice of idleness. And, of course, they were expected to be very grateful to their employer for the food and clothing he provided, not to mention the opportunity of becoming rich when their apprenticeship was over. Once more, it is perhaps better to quote the evidence of people who lived and worked in those days.

In 1816 the Government were persuaded to make an inquiry about the treatment of children in factories. Many people gave evidence, amongst them the famous Robert Owen. Here are some of the questions he was asked and the answers he gave.

Mr. Robert Owen again called in, and examined (by the *Committee on Children in Manufactories*, 1816) :

Have you anything to add to your evidence of yesterday ?

Mr. George Oughton, secretary to the Sunday-school in Stockport, informed me about a fortnight

ago in the presence of an individual, who will probably be here in the course of the morning, that he knows a little girl of the name of Hannah Downham, who was employed in a mill at Stockport, at the age of four. Mr. Turner and Mr. Oughton, if they were sent for, would, I have no doubt, state these cases before the Committee.

They were mentioned to you as a rare instance?

They were mentioned to me in the midst of a very numerous assembly of very respectable people; I inquired of them whether they knew, as they were surrounded with, I believe, two or three thousand children at the time, what was the age at which children were generally admitted into cotton-mills; their answer was, some at five, many at six, and a greater number at seven. I have also received very important information, from a very respectable individual at Manchester, relative to the age at which children are employed, the hours they are kept to work, and a variety of other particulars from very authentic sources.

State what you know relative to the number of hours which children and others are employed in their attendance on mills and manufactories.

About a fortnight ago I was in Leeds; and in conversation with Mr. Gott, whose name is well known to many gentlemen in this room, he stated to me that it was a common practice, when the woollen trade was going on well, to work sixteen hours in the day: I was also informed by Mr. Marshall, who is another principal, and considered a highly respectable manufacturer in Leeds, that it was a common practice to work at flax

mills there sixteen hours a day whenever the trade went well: I was also informed by Mr. Gott that when the Bill, generally known by the name of Sir Robert Peel's Bill, was brought in last session of Parliament, the night work at Leeds was put an end to. In Stockport, on Sunday fortnight, I saw a number of small children going to church; they appeared to me to be going from a Sunday-school; the master was with them. I stopped the master, and asked him what he knew of the circumstances of the manufacturers in Stockport: he said he knew a great deal, because he himself had formerly, for many years, been a spinner in those mills; his name is Robert Mayor, of the National School in Stockport; he stated that he was willing to make oaths that mills in Stockport, within the last twelve months, had been worked from three and four o'clock in the morning until nine at night; that he himself has frequently worked those hours.

Sir Robert Peel, Bart., examined by the same Committee, said:

"The house in which I have a concern gave employment at one time to near one thousand children of this description. Having other pursuits, it was not often in my power to visit the factories, but whenever such visits were made, I was struck with the uniform appearance of bad health, and in many cases, stunted growth of the children; the hours of labour were regulated by the interest of the overseer, whose remuneration depending on the quantity of the work done, he was often induced to make the poor children work excessive hours, and to stop their complaints by trifling bribes.

Finding our own factories under such management, and learning that the like practices prevailed in other parts of the kingdom where similar machinery was in use, the children being much over-worked, and often little or no regard paid to cleanliness and ventilation in the buildings, I brought in a Bill."

Here is some of the evidence given to another committee in 1832.

Evidence of Samuel Coulson. Examined by the *Committee on Factory Children's Labour*, 1832:

At what time in the morning, in the brisk time, did those girls go to the mills?

In the brisk time, for about six weeks, they have gone at three o'clock in the morning, and ended at ten, or nearly half-past, at night.

What intervals were allowed for rest or refreshment during those nineteen hours of labour?

Breakfast a quarter of an hour, and dinner half an hour, and drinking a quarter of an hour.

Was any of that time taken up in cleaning machinery?

They generally had to do what they call "dry down": sometimes this took the whole of the time at breakfast or drinking, and they were to get their dinner or breakfast as they could; if not, it was brought home.

Had you not great difficulty in awakening your children to this excessive labour?

Yes, in the early time we had to take them up asleep and shake them, when we got them on the floor to dress them, before we could get them off to their work; but not so in the common hours.

Supposing they had been a little too late, what would have been the consequence during the long hours?

They were quartered in the longest hours, the same as in the shortest time!

What do you mean by quartering?

A quarter was taken off.

If they had been how much late?

Five minutes.

What was the length of time they could be in bed during those long hours?

It was near eleven o'clock before we could get them into bed after getting a little victuals, and then at morning my mistress used to stop up all night, for fear that we could not get them ready for the time: sometimes we have gone to bed, and one of us generally awoke.

What time did you get them up in the morning?

In general me or my mistress got up at 2 o'clock to dress them.

So that they had not above four hours' sleep at this time?

No, they had not.

For how long together was it?

About six weeks it held: it was only done when the throng was very much on; it was not often that.

The common hours of labour were from six in the morning till half-past eight at night?

Yes.

With the same intervals for food?

Yes, just the same.

Were the children excessively fatigued by this labour?

Many times; we have cried often when we have given them the little victualling we had to give them; we

had to shake them, and they have fallen to sleep with the victuals in their mouths many a time.

Had any of them any accident in consequence of this labour?

Yes, my eldest daughter when she went first there; she had been about five weeks, and used to fettle the frames when they were running, and my eldest girl agreed with one of the others to fettle hers that time, that she would do her work: while she was learning more about the work the overlooker came by and said, "Ann, what are you doing there?" She said: "I am doing it for my companion, in order that I may know more about it." He said, "Let go, drop it this minute," and the cog caught her forefinger nail and screwed it off below the knuckle, and she was five weeks in Leeds Infirmary.

Has she lost that finger?

It is cut off at the second joint.

Were her wages paid during that time?

As soon as the accident happened the wages were totally stopped; indeed, I did not know which way to get her cured, and I do not know how it would have been cured but for the Infirmary.

Were the wages stopped at the half-day?

She was stopped a quarter of a day; it was done about four o'clock.

Did this excessive term of labour occasion much cruelty also?

Yes, with being so very much fatigued the strap was very frequently used.

Have any of your children been strapped?

Yes, every one; the eldest daughter: I was up in

Lancashire a fortnight, and when I got home I saw her shoulders, and I said, "Ann, what is the matter?" She said, "The overlooker has strapped me; but," she said, "do not go to the overlooker, for if you do we shall lose our work." I said I would not if she would tell me the truth as to what caused it. "Well," she said, "I will tell you, father." She says, "I was fettling the waste, and the girl I had learning had got so perfect she could keep the side up till I could fettle the waste. The overlooker came round and said, 'What are you doing?' I said, 'I am fettling while the other girl keeps the other end up.' He said, 'Drop it this minute.'" She said, "No I must go on with this"; and because she did not do it he took a strap, and beat her between the shoulders. My wife was out at the time, and when she came in she said her back was beat nearly to a jelly; and the rest of the girls encouraged her to go to Mrs. Varley; and she went to her, and she rubbed it with a part of a glass of rum, and gave her an old silk handkerchief to cover the place with till it got well.

What was the wages in the short hours?

Three shillings a week each.

When they wrought those very long hours what did they get?

Three shillings and sevenpence halfpenny.

For all that additional labour they had only 7½d. a week additional?

No more.

Could you dispose of their wages, when they had received them, as you wished? did you understand that?

They never said anything to me, but the children have said, "If we do not bring some little from the shop

I am afraid we shall lose our work." And sometimes they would bring a bit of sugar or some little oddment, generally of their own head.

That is, they were expected to lay out part of their wages under the truck system?

Yes.

Had your children any opportunity of sitting during those long days of labour?

No; they were in general, whether there was work for them to do or not, to move backwards and forwards till something came to their hands.

At the time they worked those long hours, would it have been in their power to work a shorter number of hours, taking the 3*s.*?

They must either go on at the long hours, or else be turned off.

Women's and Children's Labour in Mines, 1842

This is an extract from one official's report.

"Girls," says the Sub-Commissioner, "regularly perform all the various offices of trapping, hurrying, filling, riddling, tipping, and occasionally getting, just as they are performed by boys. One of the most disgusting sights I have ever seen was that of young females, dressed like boys in trousers, crawling on all fours, with belts round their waists and chains passing between their legs, at day pits at Hunshelf Bank, and in many small pits near Holmfrith and New Mills; it exists also in several other places.

"I visited the Hunshelf Colliery on the 18th of January; it is a day pit: that is, there is no shaft

or descent; the gate or entrance is at the side of a bank, and nearly horizontal. The gate was not more than a yard high, and in some places not above two feet. When I arrived at the board, or workings of the pit, I found at one of the side-boards down a narrow passage a girl of fourteen years of age, in boy's clothes, picking down the coal with the regular pick used by men. She was half sitting, half lying, at her work, and said she found it tired her very much, and 'of course she didn't like it.' The place where she was at work was not two feet high.

"Further on were men at work lying on their sides and getting. No less than six girls out of eighteen men and children are employed in this pit. Whilst I was in the pit the Rev. Mr. Bruce, of Wadsley, and the Rev. Mr. Nelson, of Rotherham, who accompanied me, and remained outside, saw another girl of ten years of age, also dressed in boy's clothes, who was employed in hurrying, and these gentlemen saw her at work. She was a nice-looking little child; but, of course, as black as a tinker, and with a little necklace round her throat."

CHAPTER VIII

IDEAS OF REFORM

IT is difficult now to speak or think of such conditions as those described in the previous chapter without disgust and bitterness. In fact, it has become common in our day to blame the employers of those days for those evils, and some people think that no language is too severe for them. But that is to measure the ways and ideals of a former very different age by those of our own time. It is to assume, also, that such awful conditions were the lot of *all* workers, whereas it was only the least fortunate who suffered thus. It also makes the mistake of assuming that conditions could, in the worst cases, have been much better with men and women as they were then, and with the driving necessities of wars, revolutions, and rapidly increasing population.

Those employers and those governors no more created the horrors we have mentioned than you or I have created the evils of our day. All the people of England, whether rich or poor, were being driven by forces stronger than they were. It was an age in which very few people thought of what we now call "welfare work"; there were few, even amongst the best

DRAWING A CART IN A COAL-MINE.
(*From a print of 1842.*)

YOUNG WOMAN CARRYING A HEAVY LOAD UP A STEEP MINE.
(*From a print of 1842.*)

A SCHOOL ABOUT 1820.
(*From the painting by Webster.*)

and most humane people, who ever gave much thought to the sufferings of the poor; even the churchmen were little concerned with the troubles of Lazarus. And such religious work as was done even by the Wesleyan Methodists and other Nonconformist Churches was aimed rather at souls than bodies.

But there were some noble and heroic men and women who devoted their lives to trying to convince influential people that it was necessary to do something for these poor sufferers, the victims of war and expansion, of change and decay.

As early as 1790 we find Dr. Percival of Manchester writing and speaking, in scathing terms, of the overcrowded, insanitary houses and streets of Manchester. And the life of the great and noble, though often misguided, Robert Owen might be taken as a summary of all that could have been done if only there had been a few more men like him, or ready to listen to him. This son of a saddler in a small Welsh town left home for London at the age of ten, to work for his brother, also a saddler. In six weeks he had become apprenticed to a Stamford haberdasher, a Scotsman, who cared for books and education. In 1787, then scarcely eighteen, he got work in Manchester, which was developing rapidly under the stimulus of the new machines.

Before long he had borrowed a hundred pounds and started a small factory of his own, and a little later became the manager and part owner of a large factory. In Manchester he met and became close friends with

John Dalton, who became one of England's greatest scientists, and Robert Fulton, who later became the pioneer of steam navigation. In a few years, aided by money lent by friends, he had bought the great New Lanark Mills near Glasgow for £60,000.

It was by these that he showed the world what might be done by means of decent housing, schools, and organisation and welfare work. When he took over the factory, it and the village adjoining were by no means the worst in Britain; but a description of what he saw there is simply appalling to us. Over 2,000 workers were employed in foul, gloomy rooms six days a week for thirteen hours a day. Nearly 500 pauper children were there. The conditions in the village were worse than the worst of our modern slums. Filth, thieving, lying, swearing, obscenity, drinking, and fighting were the rule.

But Owen believed that a man's character is made *for* him and not *by* him. And in fifteen years New Lanark had become a model village famous all over Europe. Queen Victoria's father, the Duke of Kent, was deeply interested in it and for many years remained Owen's strong supporter. The future Tsar of Russia studied it. The King of Prussia sought information about it. Visitors came from America to see this wonderful factory and village, in which, by reducing the hours and improving the conditions of labour, by good sanitation, by education, and by training in habits of temperance and thrift, by fair

dealing, by communal kitchens and dining-rooms, by caring for the aged and infirm, and particularly for the children—by all these and other similar measures of which he was the great pioneer and exemplar, Robert Owen made New Lanark a happy, contented, self-respecting place—and incidentally made huge profits for himself and for his friends.

Before long he bought out his friends, so that he might have a still freer hand, and then he mainly devoted himself to the education of the children. No child was allowed to work in his mills until it was ten, and in a few years he raised the age to twelve.

Most of his contemporaries thought it was very dangerous, if not positively wrong, to educate the poor, even to give them the power to read and write. But Owen was much broader than this. He believed in teaching children to love books; he taught history and geography; he looked upon education as the training of character.

Is it necessary to say that his people, and particularly the young, almost worshipped their benefactor? He had become famous; he had become rich. But his wealth he gave away to one good cause or another, so that later on for many years he had to be maintained by his son. His fame led him to appeal to a wider public, to try to convince the men who were governing England what could and should be done to remedy the dreadful evils. But he gained very little support; men's prejudices were too strong, and Owen had

religious views which made him a suspicious character to the pious folk of those days.

Here and there he induced a man to act. Sir Robert Peel reformed his own factories; many employers helped to found schools. But for the rest of his life Owen was fighting mainly for causes that in his own time were failures. In our time they have developed and become commonplaces, like schools, welfare work, and the great Co-operative Movement.

Robert Owen was, in fact, one of the noblest and most unselfish men, and did for the labouring poor more than almost any man of his time.

Other schools, different from his, were being established by Dr. Bell and Joseph Lancaster, under whose inspiration most of the denominational schools of to-day were founded. There were already, usually in the old towns, the little ancient grammar schools, probably founded in the fifteenth and sixteenth centuries. To them the sons of the local professional and business men went for a fee, and there were often a few free places for clever boys. There were also the "blue-coat" schools established by the Society for the Promotion of Christian Knowledge (started 1699) as well as a few endowed village schools and many Sunday-schools which taught reading and writing. But for the majority of boys and girls there was no chance of education. In 1809 Mr. Whitbread tried to get Parliament to pass a Bill to compel parishes to levy rates to support schools to teach reading, writing, and arithmetic;

but it failed to secure the approval of the House of Lords largely because it did not give enough power to the Church. In 1814, however, Joseph Lancaster founded the "British and Foreign Schools Society" in order to raise money to establish and maintain schools; and in 1817 Dr. Bell started "The National Society for Promoting the Education of the Poor in the principles of the Established Church." A large proportion of our present Church Schools were built by the National Society, which by 1831 had over 13,000 schools (of which 6,470 were both day and Sunday-schools) attended by over 400,000 children. Nor should the large number of Roman Catholic Schools, established since the Catholic Emancipation Act (1829), be overlooked. Unfortunately these children were usually taught by monitors—the older boys and girls. From these earlier schools has developed our present system of elementary education; for in 1833 the Government made its first grant for popular education—a sum of £20,000—and established a Committee of Council on Education which has grown into the present great Board of Education. We now spend over £100,000,000 a year on education.

In this same black period, too, there were noble prison reformers like John Howard and Elizabeth Fry.

CHAPTER IX

THE EFFORTS OF THE POOR

IT must not be supposed that the workers themselves were all indifferent to the dreadful conditions under which they worked and lived. No doubt many of them, like some of the poorest and worst of our modern slum dwellers, were careless of their filth and their bestiality, of their wrongs and of their children's sufferings; they were living the kind of life to which many English working folk had been accustomed for generations.

These were the people at whom the finger of scorn and loathing was pointed; these were quoted as the vicious, drunken, idle poor who must be kept at work, who must be repressed, who must not be encouraged. By these, the worst, the whole working class was too often judged.

But amongst them were many clean-hearted and clean-living men and women with ideals for themselves and their children: parents who longed for clean, decent homes and family comforts, who sought to live healthy, God-fearing lives and to bring up their children carefully and wisely. What chance had these when a man working seventy hours a week could earn barely ten

shillings, when he could not get a decent room, not to mention a house; when, as a result of the wars, of irregular supplies of raw materials, work failed; when, as a result of bad harvests or of Napoleon's efforts to starve England out, bread was nearly two shillings a loaf?

Is there any wonder that such men became desperate and tried by every means in their power to gain more comforts for their over-worked women and pale, exploited children? Sometimes such men would be provoked to sudden violence against a brutal overseer or employer; and he would be sent, almost certainly to die there, to one of the foul, fever-stricken county jails where criminals of all sorts were herded together, perhaps in underground cellars. His wife and children became chargeable to the parish if and when the wife could no longer maintain them. Others formed secret clubs or societies, and thought they would mend matters by smashing the new machines or burning the new factories. The best known of these bands were the "Luddites," of whom the following is a contemporary account.

LUDDITE RIOTS

Annual Register, 1816.

"Since the outrage at Loughborough, the greatest activity has been used in tracing out the particulars and in endeavouring to discover the authors. After the Luddites had completed the work of frame-breaking the chief of them said: 'Now, men, if you can tell us

of any machines that are working under price, if it be one or two hundred miles off we will go and break them.' Receiving a negative to this question, they directly quitted the factory, enjoining the men belonging to it, with terrible threats, not to stir for the space of ten minutes. They not only destroyed the machines, but even the lace that happened to be on the respective rollers was mostly hacked to pieces.

"It seemed a particular maxim with them to deter as much as possible any one from having a glimpse of their proceedings. Independently of the supposed number of nearly thirty who were actively concerned in committing these excesses, it is confidently believed that there were not less than fifty or sixty others stationed on the outside in the manner of sentinels or patrols in every direction, and even along the Mill Street, to within a very few yards of the market-place of Loughborough. Some of these patrols called aloud, warning the inhabitants to keep in their beds, and not to exhibit any lights; in disobedience of which one person who endeavoured to go out amongst them had eight panes broken in one of his windows, and was threatened with death if he did not keep within. About a dozen were also broken in the windows of the factory.

"The magistrates of the division have since been almost incessantly occupied in investigating the affair. The town crier went round with his bell on Sunday week, warning the innkeepers against keeping their houses open later than nine o'clock in the evening. Six men have at different intervals been taken up on suspicion, one of whom has since been set at liberty;

three remain in custody at Loughborough, and the other two were sent under an escort from that town to Leicester. Some implements, supposed to have been used in destroying the machines, have been seized, and are in the possession of the constables employed by the magistrates in this business."

If they were caught they were hung, or transported as convicts to Botany Bay or some other remote convict settlement to be treated as if they were vicious wild animals. Punishments were indeed very severe ; transportation to the colonies for quite trivial and widely different offences was common enough, as the following extract from an article by Sydney Smith in 1823 will show :

" One man is transported for stealing three bones and a pot of sausages ; in the next berth to him on board the transport is a young surgeon, who has been engaged in the mutiny at the Nore ; the third man is for extorting money . . . then comes a man who set his house on fire to cheat the Phœnix Office ; and lastly, that most glaring of all human villains, a poacher, driven from Europe, wife and child, by thirty lords of manors, for killing a partridge."

When transported these men were treated worse than slaves. Thus the fear of transportation was very strong.

But inevitably, as the new industrial villages and towns grew larger, men of the good type who felt the horror and injustice of their position were drawn

together into larger societies, and the era of trade unions, and of strikes, began. They thought they were safer in numbers. Thus the early history of the cotton industry is full of the records of strikes in Lancashire.

Unfortunately most of them were quite unsuccessful, because the workers had no money, and they were not sufficiently united. In the end they usually had to go back to work for still lower wages and under even worse conditions. The employers, with a few honourable exceptions, were against them; the gentry were appalled by their audacity in venturing to strike; the Government, and in fact practically everyone outside the ranks of the workers, were determined not to allow any such combined action.

They were terribly afraid of revolution. They had seen the mobs of Paris rise and slaughter with horrible cruelty King, Queen, and aristocrats of France. They were watching the revolutionary armies sweep over Europe trying to destroy the age-long bases of society. They had listened to Edmund Burke, or they had read his wonderful praises of the English constitution, as well as his passionate, panic-stricken denunciation of the French revolutionaries.

They were watching England save Europe and themselves from Napoleon—England, the saviour of civilisation, the hope of the future against fearsome France and the monstrous little Corsican. Shall we who have seen England save Europe and civilisation from

William Hohenzollern and Germany, who have seen starvation and Russian disorders looming like a vast ogre over Eastern Europe, can we of to-day honestly withhold our sympathy from those English folk of the years 1790 to 1850 in whose lives honest fear played so large a part? Selfish they may have been, as too many of us are to-day. Mistaken no doubt they were; probably we are too.

However that may be, there is not the slightest doubt that the great majority of the people of England were behind William Pitt when he tried to stamp out by repressive Acts of Parliament any movement amongst the poor that looked or sounded like revolution, or that talked about the rights of poor men, about "liberty, equality, and fraternity." It became therefore a crime for work-people to combine to raise wages or to improve their condition; combination was called conspiracy. Near every great industrial area, and at strategical points round London, great military barracks were built, partly for convenience of recruiting, but also no doubt to ensure the over-awing presence of soldiers in industrial areas.

These Combination Laws were passed in 1799 and 1800. In theory they made combinations of employers illegal as well as combinations of employees. But whereas individual employers could prosecute at law their work-people, it was extremely difficult, if not impossible, owing to lack of funds, for individual workers to prosecute an association of employers. Besides,

work-people could always be prosecuted under the common law for conspiracy if they belonged to a union, and this was frequently done. Here, then, we have two apparently hostile and irreconcilable forces: on the one hand the wretched workers striving to improve their lot; on the other hand practically all the rest of the nation, led by William Pitt, anxious to get on with the war and in sheer honest terror lest the ideas of revolutionary France should infect England, and, like some foul disease, destroy the ancient constitution which was the admiration of the thinking world.

Thus, on the one side the workers found it very difficult to believe that the employers had any other motive than the desire to keep their employees poor and in subjection; while, on the other side, the employers as a whole could not see that the workers, with a few exceptions, wanted only fairer treatment and wages, and a better chance in life. On both sides there was distrust. From the growing suspicion and antagonism fostered by the repressive laws enacted from time to time (for example the notorious Six Acts) there grew on the side of the workers a stronger determination to combine, in self-defence, against the masters, and to form trade unions—that is, combinations of workers in the same trade. They promoted strikes, which almost invariably failed for lack of funds or because the leaders were arrested.

At length there came into prominence an exceptionally able and astute organiser, Francis Place, a London

tailor. He, by enlisting the services of a small group of Radical members of Parliament, actually got passed in 1824 a Bill repealing the Combination Laws.

The number of trade unions that now sprang up, and the aggressiveness of some of them, created such a panic that in 1825 a new law against Combinations was before Parliament. But once more the little group of Radicals, led in the House by Joseph Hume acting on Francis Place's advice, managed to get such amendments made to it that, to the astonishment of the employers, who do not seem to have been very smart, the new Act was practically a confirmation of the Act of 1824.

From that time the masters and the Government had to rely mainly on the Conspiracy Laws in their attacks on trade unionism, and had to try to prove that combination was a conspiracy against the law. The strikes that followed, however, in the years 1825 to 1829 were failures; there was a great slump in trade, many men were out of work, and wages fell.

Then came the idea of a great general union of all trades—a trades union. This idea was fostered and developed largely under the influence of Robert Owen, who in 1834 founded the Grand National Consolidated Trades Union, in which all the workers were to be united, were to control industries, and to abolish individual competition. Many strikes followed, most of them failures for want of funds. And once again the Government began to prosecute and even to persecute.

For example, six Dorchester labourers were exiled for seven years for administering an illegal oath in the formation of a lodge or branch of the Grand National.

About this time, too, employers began to adopt the plan of engaging only those workmen who would sign a document pledging themselves not to join a union of any sort.

Thus, for one reason or another, most of these earlier unions were failures. It is probable indeed that even if the employers had not been so hostile, even if the law had been friendly to the unions, even if the great majority of English people had believed in combination and had sympathised with the aspirations of the leaders of the poor—it is more than probable that the unions would have failed.

As conditions were at that time—a period of bad trade, high prices, depreciated currency—the simple fact was that there was not enough work for all the men, women, and children who sought it. Starvation was therefore making it impossible for men to combine loyally and tenaciously, even if they had been intelligent enough or sufficiently educated to understand the value of combination. And it must be remembered that the great majority of these poor people could neither read nor write. To them the only way of winning any concession from an employer was by violence.

For the same reasons most of Robert Owen's schemes were impracticable in his day, however good and noble

the ideals were on which they were based. It was obviously of little use at that time, and in such conditions, to tell the poor that they ought to own and control the various industries ; that competition should be abolished ; that every worker should be paid by the day, almost regardless of how much work he did, or the degree of skill required, or of the value of the product of his work. Such ideas are the foundation of a kind of Socialism very different from that which every Government is bound to practise sooner or later. For the Government, even at that time, was developing, though slowly and perhaps half-heartedly, a form of State Socialism in its Factory Acts ; and those early beginnings of State Socialism have grown in our own time into a vast system of State control of industry, education, health, and sanitation. In fact, nowadays Socialism has come to mean " the ownership and control by the State of the means and methods of production " ; and we are still a very long way from that.

But the tendency towards State Socialism was being reinforced year by year by another set of ideas. To many men it seemed quite clear that the only hope of the poor was to get influence in Parliament. If only a sufficient number of the right kind of men could become members of Parliament, then, and then only, could the conditions of trade and industry be made fairer and freer for the poor and the oppressed.

Some of these men, like Francis Place, had been

saying for years that Parliament must be reformed. Prior to 1832 it was practically impossible for anybody but a rich landowner, or his nominees, to get into Parliament; and some of these landowners literally had the right and the power to send as many as eleven members to Parliament. These men owned what were called pocket-boroughs; seats in the House were actually bought and sold; decayed towns containing barely a dozen qualified electors sent two members to Parliament; and there were several cases of boroughs that no longer existed which had two members to represent them in Parliament! The elections were almost everywhere a sheer farce; votes were bought and sold; voters who had views which did not agree with those of the local magnate were either bribed or might even be disabled or locked up until the election was over! The fact was that the right to a vote in the counties was still the same in 1830 as it was in 1430. By an Act of that year it was declared that elections were wont to be made "by persons of small substance and no value," and the Act therefore limited the right of voting to resident holders of free land of the clear annual value of forty shillings. In other words, no copy-holder as such could vote, no matter how much his land was worth.

And the right to a vote in a borough might be almost anything; it varied from borough to borough, and it is hardly too much to say that in no two boroughs was it exactly the same. In some boroughs the owner

ship of certain specified houses conferred the right to a vote. In others only members of the corporation voted; in yet others every householder.

Such a system, of course, tended to keep out of the House of Commons the newly rich, the men who had made their money in trade and industry. And it soon became a real grievance with these rich industrialists that their interests were not properly represented in Parliament. A House representing the landed interests was obviously much keener about Corn Laws which kept up the price of corn, and therefore of rents; and about Enclosure Acts which made it possible to produce more corn and other foodstuffs; and about maintaining duties on imported goods, especially foods,—much keener about all such matters than about Combination Laws and Factory Acts, and about exports of manufactured goods.

Therefore there grew up a great agitation for the reform of Parliament. This movement was led by the great manufacturing interests, but was naturally supported, particularly in the North and North Midlands, by the working men in the new industrial centres.

All the most telling arguments were on the side of the Reformers. Old Sarum and Dunwich no longer existed, but returned members to Parliament because they always had done so; while Manchester, Birmingham, Leeds, Sheffield, and other great towns returned none at all because they were new towns. It was said

that seventy members were returned by boroughs which had practically no electors, twenty by boroughs with less than fifty electors, and thirty-seven with less than a hundred voters each. It was clear that, although the bulk of the population and the wealth of England was now north of a line drawn from Hull to Bristol, yet practically all the members of Parliament represented constituencies south of that line.

The opponents of reform could meet these facts only by appealing to the fear of revolution. Was not this Parliament the best safeguard of England? Had not this Parliament saved England from revolution, from Napoleon? Was it not this system which had made possible the work of Nelson and Wellington and the glorious victories of Trafalgar and Waterloo? Was there any other system that had withstood the shocks, the assaults, the horrors of the past fifty years? We, and we alone, had emerged undefeated and with enhanced glory and prestige from the terrors of the past. Was all that to be destroyed? Was this ancient and venerable structure to be brought to the ground?

And the great Duke of Wellington, to whom we owed Waterloo, was at that time still the most respected and influential man in England. He was most strongly opposed to reform of the House of Commons. He saw not the least need for it, and believed it would be dangerous. His advice to the House of Lords and to King William was to resist it. Time after time, there-

fore, Reform Bills were rejected in the House of Commons.

But by 1832 the movement had become a great agitation. It was led in the House by Earl Grey and Lord John Russell, both men of high integrity and determined to fight for the principle of fair representation. The number of their supporters in the House of Commons had grown slowly but steadily by the sheer force of facts. There was now in the Commons a majority for the Bill. The House of Lords stood in the way.

Outside the House the poor uneducated folk and even the more intelligent artisans had come to look upon the Bill as a means of salvation from their poverty and distress. If only the manufacturing and commercial interests could get representation in Parliament things would soon be altered. If only men who knew the conditions of life in the northern towns were elected those conditions would soon be improved.

Their excitement was so intense that furious riots occurred when it was known that the House of Lords had once more rejected the Bill. At Nottingham the Castle was burned down and much other damage done by a wild mob. At Bristol, warehouses, docks, and whole streets were set ablaze by the rioters. It really looked to the Government as if there would be a fierce and cruel revolution if the Bill were not passed. Then Francis Place placarded London with posters which read, "To defeat the Duke, go for gold"; in other

words, he advised people to go to the banks and draw their money in gold. So many people began to do it that a serious financial panic was feared if the banks were unable to produce enough gold at once.

At last the King was advised that if the Lords would not pass it he should create a sufficient number of reforming Peers. Thereupon the Duke of Wellington said that " in order to save His Majesty's personal honour as to the creation of Peers he would remove all pretence for such a creation by withdrawing his opposition." The opposition in the House of Lords collapsed and the Bill became the Reform Act of 1832. It disfranchised fifty-six small boroughs (which had returned 113 members), took one member from each of thirty boroughs which returned two, gave sixty additional seats to the counties, and sixty-three to cities and boroughs (mostly in the Northern and North Midland areas), which had not previously been enfranchised. Henceforth the vote was to be exercised by £10 householders in the towns. In the counties copyholders, leaseholders for lives, and tenants at will paying over £50 a year rent were added to the freeholders who already had the vote.

CHAPTER X

THE NEW GOVERNMENT AND THE POOR

THE new Parliament set to work at once. Its first achievements were:

(1) Slavery was abolished in British Dominions at a cost of £20,000,000.
(2) The first really effective Factory Act (1833).
(3) The first grant for Education, £20,000 (1833).
(4) The Poor Law Act (1834).
(5) The Municipal Corporations Act (1835).

At first sight it looks as though all those measures were designed in the interests of the poor and the oppressed. But before very long the artisans and their leaders who had so strenuously supported the agitation for the Reform Bill discovered that they gained little or nothing by the Act. Very few of them were £10 householders, and probably none were freeholders or £50 copyholders or leaseholders. They had no votes; they had no direct representatives. Certainly the Municipal Corporations Act abolished all the quaint or ludicrous franchises by which town corporations were elected. All boroughs in future were to be governed by a mayor, aldermen, and councillors; the councillors

were to be elected by all inhabitant householders who had been rated to the relief of the poor for the past three years. As a result many notorious abuses were swept away, and it became possible for towns to be properly governed and cared for. And as time went on more and more working people became qualified to vote at municipal elections, and therefore to return men of their own views. In fact this Municipal Corporations Act was in many ways far more important to poorer folk than the Reform Act. It gave them the power to improve housing and sanitation, in fact the conditions under which they lived. It also trained them to use their parliamentary votes more wisely.

But, although the artisans had thereby gained considerable power in the towns, they did not appreciate the Act at first. Their minds had been fixed on Parliament, and now the reformed House of Commons had passed the hated new Poor Law.

The Poor Law Act of 1834 abolished all the system of doles which had grown up and become so enormously costly as a result of the Speenhamland experiment. (See page 149.) Now only the really destitute were to get relief from the rates ; there were to be no doles to supplement wages. And even when a person was really destitute the relief to be obtained was made so small and so degrading that none but the degraded would ask for it until they were desperate.

In fact, the new Government was determined to repress pauperism and to reduce the poor rates. They

believed that the old system had produced hordes of idle, thriftless folk who would not work while they could draw on the rates. They believed that by this drastic reform of the Poor Law they would make many, if not most, of these idle, thriftless folk into decent, hard-working, self-respecting citizens. In this way they hoped to reform the working classes and to improve the general tone of society.

Certainly the rates fell amazingly. In 1818 they had been £7,870,000 (13*s.* 4*d.* per head of the population). Within three years of the passing of the Act they were less than one-third of that sum. During those three years, as it happened, the price of wheat was steadily falling. In 1836 it was only 36*s.* 5*d.* a quarter; in 1831 it had been 80*s.*, and in 1810 it had been over 120*s.* a quarter.

Moreover, from 1834 to 1836, many of the newly invented railways were being built, and it was not difficult for strong men to get work as navvies at least.

Then in 1837 came a succession of bad harvests and a slump in railway construction. The prices of food rose; work was much more difficult to get, and there was nothing between thousands of poor unemployed and death by hunger but the hated workhouse.

Many generations of English poor had been brought up to look upon poor relief as the natural and proper thing. Thousands of them had more or less deliberately lived on the rates for years. They had avoided work: had become loafers, drunkards, thieves. Now

their stand-by was gone; when they were destitute, and not until then, they might claim the cheerless, comfortless, shelter of the workhouse and its "hell-broth"—and even for that they must work laboriously at hateful tasks. Naturally such people were loud in their denunciation of the Poor Law.

On the other hand, were the thousands of self-respecting workers who had struggled on without poor relief. They, too, were becoming desperate as prices rose and unemployment spread. To them the mere idea of entering the workhouse was loathsome, and they too hoped that, as the Act had originally been passed for only five years, it would not be re-enacted at the end of that time.

CHAPTER XI

CHARTISM, FREE TRADE, AND TRADE UNIONS

THUS, as the year 1839 approached, a strong new movement arose confined almost entirely to artisans and manual workers generally.

This was *Chartism*, in which two currents of opinion joined. One of these, best represented by William Lovett, was an organisation of London artisans: well-paid, self-respecting men who were political theorists, believing strongly in the reasonableness of their theory of government by the people and content to trust to the making of speeches and the writing of pamphlets to convert Parliament to their way of thinking.

The other current, led by Feargus O'Connor, formed the central committee of Radical Unions in 1836 and began in 1837 to publish a paper called the "Northern Star." This paper strongly denounced the new Poor Law, urged working men to form trade unions, and advocated the reform of Parliament and of the whole electoral system.

In 1838 the two currents joined. The whole movement then devoted itself to trying to persuade Englishmen that the first thing to do if industrial conditions

were to be improved was to get "the Charter," a statement of six main demands.

(1) Annual Parliaments.

(2) Manhood suffrage.

(3) Vote by ballot.

(4) Abolition of the property qualification for members of Parliament.

(5) Payment of members.

(6) Equal electoral districts.

It was firmly believed that if only these six reforms could be secured the House of Commons would be so altered in character that the problem of low wages, high food-prices, of bad housing and sanitation would all be satisfactorily dealt with.

At first the movement gained great support, especially in the northern counties; great meetings were held; petitions to Parliament were signed, and many of the Chartists were full of hope.

This is what a writer in 1838 thought about them:

CHARTISM

Annual Register, 1838.

"In the autumn of the year a very uneasy spirit began to display itself among the working classes in the manufacturing counties. Immense meetings were convened in various quarters and the language of the demagogues who addressed the multitudes on these occasions was highly inflammatory. The dissatisfaction of the people was, no doubt, connected with the

new Poor Law, which was extending its operations through those districts; but it is probable that its more immediate cause was the very high price of bread. It was, however, a remedy of a very general and sweeping character that the population was taught to demand, being nothing short of universal suffrage. A document called the 'People's Charter' was framed and put in circulation, the articles of which, as may be supposed, are of a somewhat extravagant description.

"It became a favourite practice with the parties in these transactions to assemble by torchlight in the open air. A certain solemnity and mystery attached to those nocturnal meetings which struck the imagination of the vulgar, and an opportunity of attending them was moreover afforded to those whose employment did not admit of their being present in the daytime. Among others, a public meeting of 'Chartists,' as they called themselves, was convened in the daytime at Palace Yard, Westminster; but the proceedings seem to have been rather flat, though the speeches delivered on the occasion were sufficiently violent; but the most numerous and important of these assemblages took place on Kersal Moor, near Manchester. The number on this occasion was variously calculated; but there seems to be reason for thinking that it did not fall far short of 200,000. Mr. Fielden, the member for Oldham, was called to preside; and he took the chair accordingly.

"Perhaps the political views of these 'Reformers' will be best understood from the following passage of Mr. Stephen's speech. 'The Principle of the People's Charter,' said he, 'was the right of every man that

breathed God's free air, or trod God's free earth, to have his home and his hearth, and to have happiness to himself, his wife and his children, as securely guaranteed to him as they are to every other man whom the Almighty had created. The question of universal suffrage, was, after all, a knife and fork question. If any man asked what he meant by universal suffrage, he would tell him : he meant to say that every working man in the land had a right to have a good coat and hat, a good roof over his head, a good dinner upon his table, no more work than would keep him in health, and as much wages as would keep him in plenty, and the enjoyment of those pleasures of life which a reasonable man could desire.' "

Unfortunately for the Chartists, the Poor Law was re-enacted and made permanent.

Even more unfortunate for the Chartists, perhaps, was the fact that a very powerful new movement of a totally different kind arose. It was backed by large sums of money and led by two of the ablest men in England at that time It also had a much more direct and vivid appeal to the mind. In 1839 was formed the Anti-Corn Law League, led by Richard Cobden and John Bright, two men of brilliant abilities and striking personalities. Both were manufacturers of cotton goods. They were supported by the majority of manufacturers in the North of England and they proceeded to convince the rest of England.

Clever lecturers were sent about to address meetings in towns and villages. Their text was, "Abolish

the Corn Laws." Their argument was, "Let foreign and colonial corn come into the country duty free so that other countries may pay for our goods with their corn. Then, and then only, shall we get cheap food. Then, and then only, shall we be able to export our manufactured goods in large quantities. Then, and then only, will there be plenty of work here for those who are willing to work." *Cheap food and plenty of work!* Such cries were bound to win support in those distressful times. They were far more attractive than secret ballots and manhood suffrage. They turned the attention of many would-be Chartists to the agitation for the repeal of the Corn Laws.

The more powerful the Repeal Movement grew the less effective became the Chartist Movement. The leaders of the Chartists began to quarrel amongst themselves; some were anxious to keep to constitutional methods, others wanted violence, bloodshed, revolution, to achieve their ends. In the meantime the agitation against the Corn Laws gained in strength. The dreadful famine in Ireland (1845) convinced even Sir Robert Peel, the Prime Minister, of the importance of cheap food.

In 1846 he repealed the Corn Laws, and before long England became a Free Trade country. There were no taxes on imported goods except such as were needed to provide the Government with revenue: taxes such as those on wine, tea, coffee, cocoa, and tobacco. Previously duties had been imposed on imports, so that

foreign goods should be kept out of the country, or should, at any rate, be dearer than English goods. In a later chapter we shall refer to this matter again.

It is necessary here, however, to point out that in its own day the agitation for Free Trade was very successful. Food did become cheaper; work did become more plentiful. Yet there has always been ever since a party in England that hopes to reimpose protective duties, and at any time it is possible that these plans and views may be adopted again.

But in 1848 Chartism was practically dead. In its own day it was a failure. But it should never be forgotten that practically all its avowed objects have been achieved. Manhood suffrage, vote by ballot, payment of members, roughly equal electoral districts, a steady lowering of the property qualification for M.P.'s—all these have been secured. But it must be remembered with at least equal emphasis that the avowed objects of the Chartists were only means to other ends. They sought electoral and parliamentary reform so that the social and industrial evils of the time might be remedied by Parliament.

But some years before 1848 many working men had begun to think that self-help was probably best after all. Several attempts had been made to form co-operative societies which should produce and sell to members goods at practically cost price. But none of these societies was really long-lived until 1844, when the Rochdale Pioneers showed how co-operative schemes

could be made successful. The result of the Rochdale experiments is seen in the huge organisation known to-day as the Co-operative Wholesale Society, with its great factories and immense trade, serving thousands of local co-operative stores, each of which belongs to its members.

Then, too, trade-unionism began to take a new form. Practically everybody at that time believed in "the wages-fund theory." According to this doctrine there was at any given time only a certain amount of money in the country available for wages; therefore the more workers there were the smaller the individual wages.

Believing this theory, these unions, especially in the metal trades, tried to limit the number of workers in each of these trades. They tried to limit the number of apprentices, they tried to persuade surplus workers to emigrate. In 1850 several of these smaller unions joined together under the leadership of William Newton and William Allan to form the Amalgamated Society of Engineers, which began with over 11,000 members. Its first efforts were (1) to abolish overtime, so that more work might be available for its members; (2) to ensure that only skilled men should work machines. This led to a lock-out by the employers, and as a result the A.S.E. was defeated for a time and had to give up its demands.

But it became a model union for other bodies to imitate. Their aims were to build up strong societies with reserve funds; to make it difficult for employers

to employ non-union labour; to insist on standard wages based on the amount paid by the best employers. For a time at any rate they ceased to believe in strikes; obviously, if the wages-fund theory were true, strikes to get better wages were useless.

In addition, they wanted a few working men to be members of Parliament; they wanted an extension of the franchise; they wanted schools for their children.

Thus, in all the great industrial centres there came to exist groups of men determined to make trade unions effective in improving the conditions of labour both directly by trade union action and indirectly by political agitation. By 1866 there were many powerful national unions, and many people began to get alarmed by their power and their influence. It was largely in recognition of their power that Disraeli in 1867 led the House of Commons to pass the second great Reform Act, which gave votes to most artisans in the towns.

In 1867 a Royal Commission was appointed by the new Parliament to inquire into trade-unionism. The result of the inquiries was the Act of 1871, which allowed unions to accumulate funds and gave protection to these funds, but reaffirmed the illegality of "picketing" or of any interference with employers, or with men who were willing to work during a strike.

Another result of the Reform Act of 1867 was that at the election of 1874 thirteen labour candidates went to the poll; two of them, Alexander Macdonald

and Thomas Burt, the chief officials of the Miners' Union, were elected—the first Labour members. Many Liberals went down as a result of labour votes, and a Tory Government was formed. In 1876 the Acts of 1871 were repealed. A new "Employer and Workmen Act" was passed. Peaceful picketing was permitted; both employed and employer were to be dealt with by the ordinary civil law.

But after 1874 another period of acute depression set in. Many unions tried to stop the fall in wages by strikes, but their funds now became exhausted and they had to give in. By 1879 many unions were bankrupt and broken again. The distress was so acute that many influential, well-educated, and thoughtful people began to look upon poverty in quite a new light, as a sort of social disease which ought to be tackled.

Public opinion was beginning to realise that much of the poverty, squalor, and misery of the poor was remediable. A Royal Commission inquired into the housing of the poor. A Committee of the House of Lords inquired into the sweating system. The Temperance Movement and the Salvation Army both became powerful forces in English life. For the first time there appeared outside the ranks of the artisans and labourers themselves a really powerful body of opinion that was sympathetic to them and their troubles.

As a result of this opinion the London match-girls won their strike in 1888. Still more important, in 1889 the Dockers, led by Ben Tillett, gained by a

strike an improved minimum wage (6*d.* an hour instead of 5*d.*) and better conditions of work. In this case, too, the victory was largely due to the help both in money and in sympathy given by more fortunate members of society.

The success of these and other unions led to the growth of what was called the "New Unionism," in which the object was very largely to induce men to join unions and to be loyal to them not so much for the benefits they themselves might get, but for the sake of all working in the trade. This ideal was based upon the conception of working class solidarity. "Let us all stand together and help each other, since all labourers are more or less in the same boat." Such a cry appeals to the sense of loyalty and the sporting spirit so common amongst, and so valued by, most Englishmen of all classes.

But ten years later the law once more was invoked to the aid of the employers. The Taff Vale Railway Company sued the Amalgamated Society of Railway Servants for inducing some of the company's workmen to break their contracts in order to cease work. It had always been assumed that trade unions were not suable in this way and could not be made to pay damages. But after much litigation the House of Lords decided that trade unions were corporate and responsible bodies, and that the Society of Railway Servants must pay heavy damages to the Railway Company.

The result of this decision was disastrous to the trade unions for a time. Whoever suffered direct loss by the action of the Union could now claim damages from the Union.

Once more the unions began to turn to political action; they must influence Parliament to alter the law, so that unions might use the strike with impunity.

At the General Election of 1906 twenty-nine Labour members were returned. The "Trades Disputes Act" followed; it was far from being all that the unions wanted. It did not wipe out the Taff Vale decision and restore the position gained by the Acts of 1871 and 1874. By those two Acts it had been assumed that, as trade unions were not legal associations like corporations or public companies, they could not be proceeded against at law.

But by the Trades Disputes Act the unions were given a very special sort of privilege which to many people seemed very unjust. They were allowed, in a trade dispute, to do things which other persons or associations were not permitted to do without becoming liable for damages!

This Act placed unions in a position of great strength. But for some years afterwards the main activities of unions were concentrated on getting influence in Parliament, and large sums of money from trade union funds were devoted to supporting the claims of Labour candidates for Parliament.

A Mr. Osborne, a member of the Railway Servants

Society, objected to this and thought it illegal. He sued the Society, and the House of Lords in 1909 decided that the objects of a trade union did not include the right to take parliamentary action; therefore, to spend money in the way objected to by Mr. Osborne was illegal. But this difficulty was soon overcome.

Since that time there has been a general tendency for the smaller unions to amalgamate to form larger ones; for example, the Amalgamated Society of Railway Servants has become the National Union of Railwaymen, incorporating other unions.

At the same time there has developed, especially amongst the younger members of trade unions, a doctrine called Syndicalism, or Guild Socialism. The theory of it is at least as old as Robert Owen, but its modern growth in England is due very largely to an attempt to imitate the ideas of a small section of American agitators called the Industrial Workers of the World, and of a similar movement in France. So far it has gained very little support in England. Its theory is that all the workers in or about the mines, for example, shall control and work all the mines; the railway workers shall work and control the railways in their own and the public interest. How far such an ideal is practicable no one has yet proved, and it is very doubtful how far it would benefit either the workers or the nation. In any case it can be achieved only by a very slow process of development and education.

But while trade unions have been developing in this way employers have also been combining. For example, practically all the owners of hosiery and woollen underwear factories belong to an association formed to secure united action as regards wages and prices. The same is true of all the great industries: cotton, wool, steel, and mining. So that, when a crisis comes now, instead of each employer facing his own workpeople as he did a hundred years ago, instead of each employer facing a local trade union as he did fifty years ago, a committee of employers faces the executive committee of a national union. Moreover, these associations of employers are sometimes so close and binding and include so much of a trade, for example, the iron trade, that they have almost become what the Americans call "Trusts," or "Rings." They are able to control the output of, say, steel in such a way as to determine the prices and the amount of work to be done; in other words, the amount of employment for workers.

Whether the great unions and the great associations of employers will be able to stand the shocks of the dreadful slumps and trade depression following the Great War remains to be seen. It is very certain, however, that for many years the Government of the country as well as the unions and the employers will have a most dangerous and difficult time. How difficult and dangerous the situation may be was illustrated by the closing of the coal-mines in 1921 because,

in the first place, miners and employers could not agree about wage-rates; and, in the second place, because some of the miners' leaders thought they could compel the Government and the country as a whole to control the mines and the profits derived from them in the interests of the miners.

Unfortunately, there are extremists on both sides: a small minority of employers who would like to see the workers in their industry made more servile and dependent; a small minority of workers who would like to abolish employers altogether. Between them is the great mass of English folk of all shades of opinion, of all degrees of wealth and poverty, of all shades of intelligence and culture, who want the country and themselves to be prosperous and comfortable. To the great majority of us the spirit of give and take, of fair play, the desire for a straight deal in everything, and especially in the relations between employer and employed, is one of the dominating influences in our lives. There are very few of us who are not content to accept the fact that there are employers and employed, and to plod on doing our best, whether we pay or earn the wages, provided that we secure fair play and a just apportionment of wages on the one hand and of profits on the other.

CHAPTER XII

THE GOVERNMENT AND THE CONTROL OF INDUSTRY

WE have seen, first, how the manufacturers as a body influenced Parliament by getting it reformed, and by agitating successfully for a repeal of the Corn Laws; second, how the manual workers, disappointed by the Reform Act of 1832, tried to influence Parliament by agitating for "The Six Points of the Charter," and failed in their own time but prepared the ground for reforms that came later; third, how these manual workers began to concentrate their attention on the formation and strengthening of trade unions; and how they were able to secure for their unions a recognised and powerful position.

We must now consider what the attitude of the Government was to these movements and to the difficulties and the distresses of the people as a whole.

To begin with, we must refer once more to that clever Scottish Professor, Adam Smith, and his book, "The Wealth of Nations." Before his time practically everybody in England had accepted the system and principles of Government which had been worked out and established by Queen Elizabeth and her great

statesmen. Under that system—called by later historians the Mercantile System—it was the duty of the Government to foster and to regulate trade and industry to make the country as nearly self-sufficing as possible. Above all things, care must be taken to sell *for cash* more goods than we bought; since it was then believed that the wealth of a country depended mainly on the amount of gold money available in it. They had, therefore, done their utmost to keep out of the country any manufactured goods that would compete with English manufactures; they had done all they could to make England produce its own foodstuffs.

They had gone even further than this. By the Statute of Apprentices (1563) they had tried to prevent men leaving agriculture to go to work in towns as artisans; had also tried to make men work at the trades they already had; and had tried to impose rates of pay and conditions of employment upon all classes of workers. In other words, it was an age of state regulation of industry. Moreover, if an able-bodied man would not work his life must be made very uncomfortable for him; he might even be whipped and branded with a hot iron. In fact, the Elizabethan Poor Laws not only punished the idler but tried to provide work for those who could not get it, and food and shelter for those unfit to work.

Now that Elizabethan system of laws had remained practically unchanged for over 200 years. Nobody had troubled very much to bring it up to date, to amend it,

to make it suit the changed conditions. The administration of it was left almost entirely in the hands of the local unpaid Justices of the Peace, who were supposed to fix wages yearly according to the cost of living, and to see that the Poor Laws were properly carried out.

Naturally enough, many of the J.P.'s did not do the work impartially, especially as, when fixing the amount of the poor rates, they were really deciding what they and their friends, usually the largest rate-payers, should pay. Here and there Justices were found always anxious to do what they thought to be their duty. That was what the Berkshire justices were doing when in 1795, at a general meeting of J.P.'s held at the Pelican Inn, at Speenhamland, they decided :

(1) That the present state of the poor does require further assistance than has been generally given them.

(2) And that when the Gallon Loaf of Second Flour, weighing 8 lb. 11 oz., shall cost 1*s*., then every poor and industrious man shall have for his own support 3*s*. weekly, either produced by his own or his family's labour, or an allowance from the poor rates, and for the support of his wife and every other of his family, 1*s*. 6*d*. When the Gallon Loaf shall cost 1*s*. 4*d*., then every poor and industrious man shall have 4*s*. weekly for his own, and 1*s*. 10*d*. for the support of every other of his family. And so in proportion, as the price of bread rises or falls (that is to say), 3*d*. to the man, and 1*d*. to every other of the family, on every penny which the loaf rises above 1*s*.

Simultaneously the Magistrates published a recommendation to overseers to grow potatoes, to set poor people to work, and to offer them one-third or one-fourth of the crop, and to sell at 1*s.* a bushel, also to get in a stock of peat, faggots, furze, etc., in the summer, and to sell at a loss in the winter.

Thus these kind justices made it profitable for a man not to work, and particularly profitable to have a large family. The fact that their policy was generally adopted indicates how little thought or intelligence was given to these matters. However that may be, it is clear, if only from this one example, that the whole system was inefficient.

It was this effete system of State regulation of trade and industry that Adam Smith attacked in one of the most important books ever written. But it must always be remembered that his book was not published until 1776; that it took many years for his ideas to become popular, and that he was writing before the Industrial Revolution had taken place. Probably his views would have been very different if he had written thirty or forty years later. As it was he argued very cleverly and convincingly that the wealthiest and happiest and most prosperous country would be the one that was most free from all kinds of state regulation and interference.

He pleaded that if every man were left quite free to pursue his own self-interests then every man would be employed most happily, prosperously, and to the best

advantage of the State. Therefore it was the duty of the State to remove all possible restrictions on trade except such as were absolutely necessary for national defence and revenue. Nothing must be allowed to interfere with the merchant shipper's desire to buy in the cheapest market and to sell in the dearest. Nothing must hamper the manufacturer in the control of his mine, foundry, or factory; no laws, no regulations, no combinations of work-people, or of employers. Nothing must hamper the workman, or his wife, or his child in their competition for work with other workmen, and their wives and children.

Now, if we could assume that men would ever be equally good, equally wise, equally anxious to do their best for their country and their fellow-men, we might become strong supporters of Adam Smith as the great majority of English people were by 1850. But his doctrines were so acceptable to the people of those days because they were aimed at an obsolete and inefficient system of State control that was undoubtedly harmful. In thirty years England had become an industrial State—the only one in the world. It could no longer feed itself. It could no longer supply its own raw materials for its manufactures. It had become dependent, and was becoming rapidly more and more dependent, on foreign trade and particularly on trade with its vast colonies.

Clearly a new system of Government was needed, a new set of principles on which to base a system.

Unfortunately such was the power of Adam Smith's arguments, such were the weaknesses of the effete Mercantile System, that men too readily assumed that no system at all was needed. Thus for many years British trade and industry were left to themselves. The only principle on which the Government acted as a rule was to make sure that things were left alone. For example, laws against combinations of workers or of employers were passed because combinations obstructed the freedom of industrial workers or employers.

Thus for many years the prevailing doctrine in Britain was the "Let alone" policy—the policy of *laissez faire*.

We have already seen the effects of this policy on trade and industry. Possibly without unrestrained freedom of action British manufacturers would not have been able to build up their businesses so rapidly and so hugely. Possibly we could not have beaten Napoleon without that great expansion of productive power. Possibly we should not have gained the Reform Act of 1832 or the cheap food that followed the repeal of the Corn Laws.

But it is certain that if a careful system of control had been devised, such as Elizabeth and her helpers worked out, many of the worst evils could have been avoided. However, such a reflection is rather useless nowadays. If the majority of men at that time had felt the need of a system of Government control they

would doubtless have produced one. They did not and could not feel such a need.

But it is equally certain there was always a number of thoughtful, fair-minded people who were anxious to remedy the worst evils of the times. These people therefore tried to improve conditions in their own areas. To them we owe many of the early schools, many of the orphanages, hospitals and refuges, and other charities. To such earnest, good people is largely due the establishment in many large towns of Mechanics' Institutes, where working men might educate themselves. Their chief trouble was that such widespread evils could not be adequately dealt with save by the Government, and to believe the truth of that was to be false to their principles.

The policy of *laissez-faire* had become almost like a religion. For a Government to interfere with what were thought to be the laws of Nature was, if not downright wicked, at any rate very dangerous. Therefore a study of the nineteenth century in England becomes very largely a study of the change in the ideas of the governing body about industrial evils. It is at the same time a study of how the governing body itself came to be altered by the Reform Acts of 1832, 1867, 1884–5, 1918. In another aspect it is a study of how the Elizabethan ideas of control, after breaking down utterly under the pressure of the Industrial Revolution and under the arguments of Adam Smith and his successors, re-

vived once more and came to be applied to all sorts of new problems.

In other words, as social evils grew, so the number of people grew who were deeply concerned to find remedies for them ; or, as we say, public opinion was gradually roused and became strong enough, not only to induce Parliament to interfere, but even to change the character of Parliament if the reforms were not proceeding rapidly enough.

Thus we have a curious spectacle in the first fifty or sixty years of the nineteenth century. The Government consisted largely of men who firmly believed in non-interference, in the greatest possible freedom for manufacturers and commercial men. Yet throughout the same period there is a steadily increasing number of Acts of Parliament interfering very definitely with the liberty of employers to do just as they liked with their work-people. And at the same time, especially in the first thirty years of the century, the Government savagely represses and even persecutes poor work-people like the Lancashire workers (Peterloo 1819), the Derbyshire quarrymen (the Pentrich riots, 1817), or the Dorchester labourers (1834) if they venture to combine in any way to improve their hard lot.

What " Peterloo " was like may be gathered from the following account written at the time.[1]

" The adjournment of the preceding meeting, the considerable interval of preparation which had been

[1] " Annual Register," 1819.

allowed, a vague feeling perhaps that such assemblages would not much longer be permitted—all conspired to render the concourse great beyond all former example. A little before noon on the 16th of August the first body of reformers began to arrive on the scene of action, which was a piece of ground called St. Peter's Field, adjoining a church of that name in the town of Manchester. These persons bore two banners, surmounted with caps of liberty, and bearing the inscriptions: 'No Corn Laws,' 'Annual Parliaments,' 'Universal Suffrage,' 'Vote by Ballot.'

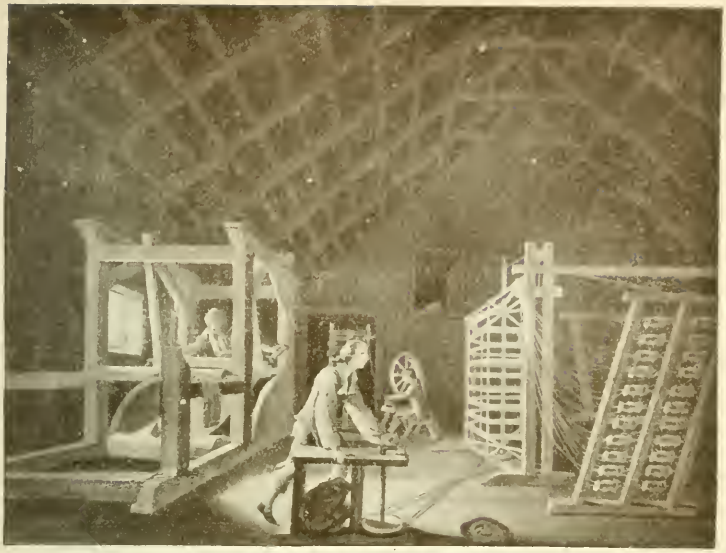
"Some of these flags, after being paraded round the field, were planted in the cart on which the speakers stood; but others remained in different parts of the crowd. Numerous large bodies of reformers continued to arrive from the towns in the neighbourhood of Manchester till about one o'clock, all preceded by flags, and many of them in regular marching order, five deep. Two clubs of female reformers advanced, one of them numbering more than 150 members, and bearing a white silk banner. One body of reformers turned their steps to the sound of a bugle with much of a disciplined air; another had assumed to itself the motto of the illustrious Wallace, 'God armeth the Patriot.' A band of special constables assumed a position on the field without resistance. The congregated multitude now amounted to a number roundly computed at 80,000, and the arrival of the hero of the day was impatiently expected.

"At length Mr. Hunt made his appearance, and after a rapturous greeting was invited to preside; he signified his assent, and, mounting a scaffolding, began

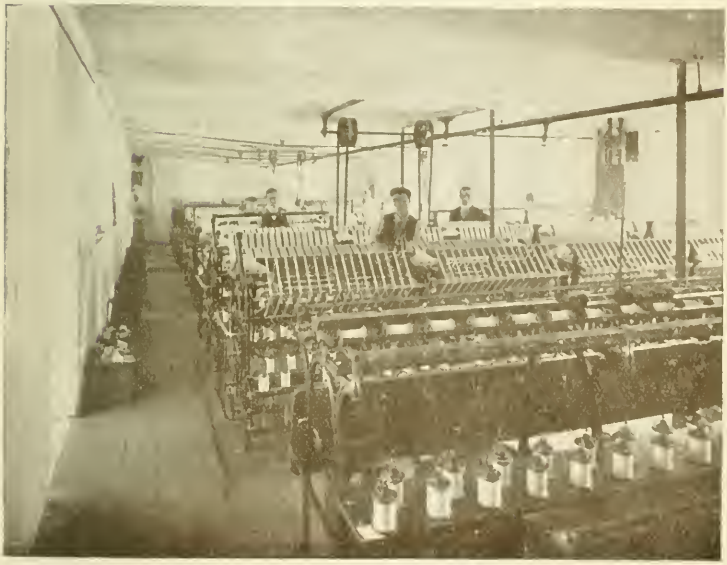
to harangue his admirers. He had not proceeded far, when the appearance of the yeomanry cavalry advancing towards the area in a brisk trot excited a panic in the outskirts of the meeting. They entered the enclosure, and, after pausing a moment to recover their disordered ranks and breathe their horses, they drew their swords and brandished them fiercely in the air. The multitude, by the direction of their leaders, gave three cheers, to show that they were undaunted by this intrusion, and the orator had just resumed his speech to assure the people that this was only a trick to disturb the meeting, and to exhort them to stand firm, when the cavalry dashed into the crowd, making for the cart on which the speakers were placed.

"The multitude offered no resistance, they fell back on all sides. The commanding officer then approaching Mr. Hunt, and brandishing his sword, told him that he was his prisoner. Mr. Hunt, after enjoining the people to tranquillity, said that he would readily surrender to any civil officer on showing his warrant, and Mr. Nadin, the principal police officer, received him in charge. Another person, named Johnson, was likewise apprehended, and a few of the mob; some others against whom there were warrants escaped in the crowd.

"A cry now arose among the military of 'Have at their flags,' and they dashed down not only those in the cart, but the others dispersed in the field, cutting to right and left to get at them. The people began running in all directions, and from this moment the yeomanry lost all command of temper: numbers were trampled under the feet of men and horses; many,



INTERIOR OF A FACTORY IN 1783.
(*From an engraving published in that year.*)



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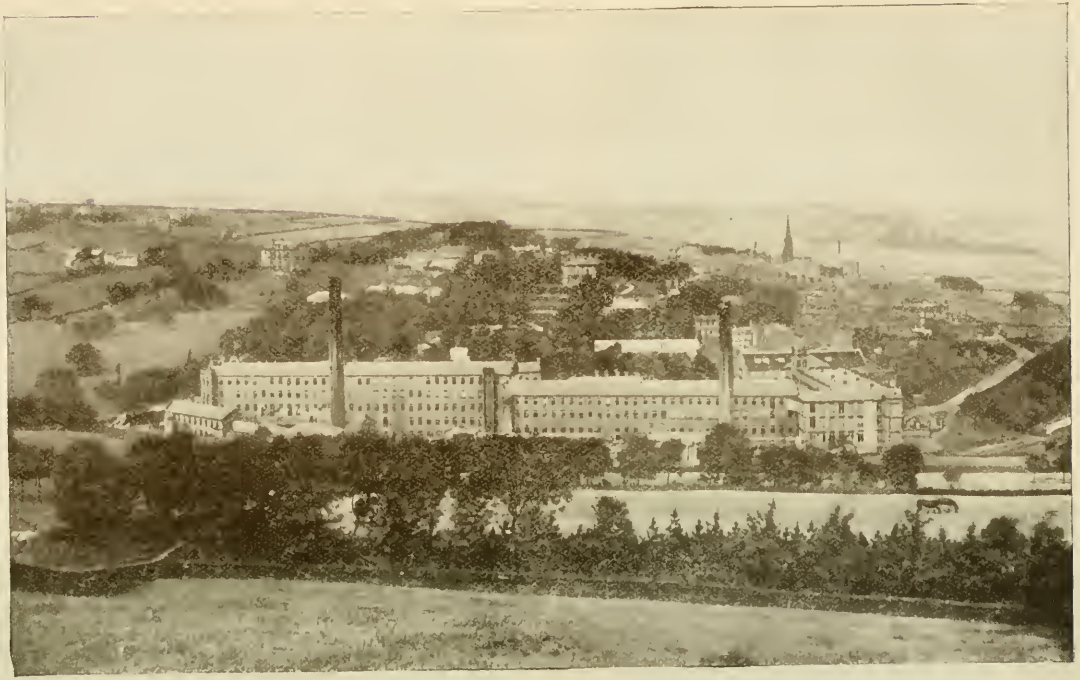
INTERIOR OF A MODERN FACTORY.



A WELL-EQUIPPED MODERN FACTORY IN RURAL SURROUNDINGS.
BROOKROYD MILLS, HALIFAX.

both men and women, were cut down by sabres; several, and a police officer and a female, slain on the spot. The whole number of persons injured amounted to between three and four hundred. The populace threw a few stones and brick-bats in their retreat; but in less than ten minutes the ground was entirely cleared of its former occupants, and filled by various bodies of military, both horse and foot.

"Mr. Hunt was led to prison, not without incurring considerable danger and some injury on his way from the swords of yeomanry and the bludgeons of police officers; the broken staves of two of his banners were carried in mock procession before him. The magistrates directed him to be locked up in a solitary cell, and the other prisoners were confined with the same precautions. The town was brought into a tolerably quiet state before night, military patrols being stationed at the end of almost every street."

The Government was indeed in a very difficult position. As a Government, no matter of what party, it had to do its utmost to safeguard the interests of the nation as a whole. Faced by the fear of revolution and by the doctrines of Adam Smith, and his followers Ricardo and William Senior—in fact, of practically all thinking people of the time—the Government's only course was to try "to keep the ring"; to try to keep order in the country and to maintain the Army and Navy while the various interests in the country competed in the effort to make themselves, and incidentally the whole country, prosperous. The

chief concern of the leaders of those days was the production of wealth, as they understood it; and if anybody tried to convince them, as Robert Owen tried, that it was much more important to secure a better distribution of wealth, they called him mad.

Certainly, if the rulers of those days are to be judged by results, we may say this to their credit. England was the only country in Western Europe that did not have revolutions and civil war; England was very wealthy and prosperous, while other countries remained poor and backward; England built up a successful empire, and gained a world supremacy not only as a naval power but as an industrial and commercial power; and even at their most wretched and most miserable periods, the English working classes were probably better off than the poor of any other country in Europe, and yet more was done for them by the Government than was done for any other European people.

And it must be remembered also that the problems the English Government had to face were unique; no other country had them because no other country had become industrialised. The other countries of Europe were still mainly agricultural until the latter half of the nineteenth century was well on its way. Thus, our rulers of those days, Castlereagh, Canning, Peel, Melbourne, Palmerston, had little to guide them save mother-wit and the dominant ideas of the time —*laissez faire* and "produce wealth."

From this point of view, then, there is much to be said on behalf of the Government in those days. But when thoughtful men saw their fellow Englishmen starving with their wives and children, contracting dreadful diseases and deformities owing to bad food, overcrowding, and overwork, they were apt to overlook all such arguments in favour of their rulers and to be enraged against them for what they called their callousness and indifference. It was the recurrence in growing waves of this righteous indignation which carried the Government forward to reform the conditions of work in factories and mines and the conditions of life in the wretched homes of the poor. Appropriately too, it was often a manufacturer or a group of manufacturers who initiated the movement for reform and carried it forward to success.

We have already dealt with the Anti-Corn Law League led by Cobden and Bright, both Lancashire manufacturers; one of their main objects was undoubtedly to improve the lot of the poorer workers by gaining for them cheaper food; and although Cobden and Bright got much support from less virtuous manufacturers who saw that cheap food meant cheap labour, it must not be forgotten that their movement did produce cheap food and greater opportunities for English industry. Nor can any of us who have lived through the Great War, when high wages were accompanied by still higher prices, be induced to

believe that cheap food, clothing, and shelter are not very desirable.

Let us then run rapidly over the series of Acts which were passed to protect the poor who worked in mines and factories and who lived in overcrowded, insanitary homes.

The first of the series was the "Health and Morals of Apprentices Act" of 1802, passed as a result of the representations of Sir Robert Peel (the elder), a Lancashire millowner. It was an attempt to secure the periodical cleansing and regular ventilation of factories, and to limit the hours of labour of *pauper apprentices* to twelve a day without night work; it was also provided that these apprentices were to be instructed in reading, writing, and arithmetic, and were to be given one suit of clothes every year. Such apprentices were to attend church once a month at least, and boys and girls were to sleep in separate rooms and not more than two in a bed.

Now it is clear that if it was necessary to put all these rules in an Act of Parliament, then children must have been working more than twelve hours a day; they must often have been doing night-work, they were often receiving no education, and were not being properly clothed; they were sometimes being herded together regardless of sex or decency. As for the factories themselves, many of them were little more than old barns, sheds, or cellars, badly lighted, hardly ventilated, and seldom warmed even in the coldest

weather, and in them many of the children lived day and night.

Unfortunately the Act was left to be carried out by the local unpaid Justices of the Peace, many of whom were themselves the employers; those very justices in whose hands the administration of the Poor Law had broken down! The central Government had no machinery for enforcing the Act. Is it any wonder, therefore, that it had very little effect? that only the few good employers, like Peel, took any notice of it?

In any case, it applied only to pauper apprentices working in factories, employing twenty or more persons. In other words, the small employer, who is often the worst, was untouched whether he employed pauper apprentices or not, no matter how damp, filthy, and unhealthy the cellar or barn might be in which his weaving or spinning was done. But it was something in those days to get an Act of any sort passed to protect the poor and defenceless, and there is no doubt that some J.P.'s loyally and earnestly tried to see that the law was obeyed in their districts. On the other hand, if the J.P.'s were too energetic, then some employers gave up taking pauper apprentices and took on free apprentices who were not subject to the law!

In 1819 the second Factory Act was passed on the recommendation of a committee of the House of Commons. This Act applied only to cotton-mills,

largely because, being usually new creations, they were more in the public eye. The Act was the result of Robert Owen's activities and example. In fact, the original Act was drafted by Owen himself. Unfortunately, Parliament whittled it down to something very much less effective than Owen aimed at. He wanted all mills—cotton, wool, flax—employing twenty or more persons to be included. Also he wanted Government inspectors to be appointed to see that the Act was carried out.

All he got was an Act prohibiting the employment in cotton-mills of children under nine years of age and limiting the working hours of children under sixteen years of age to twelve hours a day exclusive of meal-times, with no night-work. The administration of the Act was again left to the J.P.'s, and was therefore of little value. But, lest it should be too effective, in the next year a short amending Act was passed permitting time lost by water failure or other accident to be made up by working overtime or at night. In 1825 J.P.'s who were factory owners (or their fathers or sons) were prohibited from dealing with cases arising under the Factory Acts.

In 1830 Richard Oastler, a Yorkshire factory owner, and, in 1831, Michael Sadler began to agitate for a ten hours' day; they were strongly opposed by the manufacturing interests in Parliament; and all Sadler got by introducing a Bill for a ten hours' day was the appointment of a committee to inquire into

the matter. Sadler was himself the chairman of the committee, and its report is a most valuable and interesting account of the conditions of industry at that time.

Unfortunately, at the General Election in 1832 Sadler lost his seat (Macaulay, the great historian, won it) and Lord Ashley, afterwards Lord Shaftesbury, was invited to take up the leadership of the Short Time Committee. He hesitated long before giving up a life of ease, happiness, and power to take on an unpopular cause, which would turn many of his friends against him, which would cause him much worry, anxiety, and pain. But he accepted the leadership of the movement to protect the factory children, and devoted the rest of his public life almost wholly to their cause.

The report of the committee upset the manufacturers. So angry were they that they asked for another report to be made by Commissioners sent from London.

But this report, too, went against the employers, and the Factory Act of 1833 has as its chief feature the appointment of Government Inspectors of Factories. Here are a few out of many such bits of evidence given to the Commissioners.

I

"We used to come at half-past eight at night, and work all night till the rest of the girls came in the

morning. They would come at seven. Sometimes we worked on till half-past eight the next night, after we had been working all the night before. We worked in meal-times except at dinner. I have done that sometimes three nights a week, and sometimes four nights. It was not regular; it was just as the onlooker chose. Sometimes the slubbers would work on all night too, not always. The pieceners would have to stay all night then, too. They used to go to sleep, poor things, when they had over-hours in the night."

II

"I reside at Northgate, Huddersfield, in Yorkshire. I was seven years of age when I began to work at Bradly Mill, near Huddersfield; the employment was worsted spinning. The hours of labour at that mill were from five in the morning till eight at night, with an interval for rest and refreshment of thirty minutes, at noon; . . . we had to eat our meals as we could, standing or otherwise. I had fourteen and a half hours (a day) actual labour when seven years of age; the wages I then received was two shillings and sixpence per week. . . . In that mill there were about fifty children, of about the same age. Strapping was the means by which the children were kept at work. It was the main business of one of the overlookers to strap the children up to this excessive labour—the same as strapping an old restive horse that has fallen down and will not get up. . . ."

III

"I began to work at Mr. Busk's flax mill when I was six years old. In that mill we worked from five

in the morning till nine at night when they were 'throng'; the usual hours of labour were from six in the morning till seven at night. The time allowed for our meals was forty minutes at noon; not any time was allowed for breakfast or 'drinking'; these we got as we could. When our work was bad, we had hardly any time to eat them at all; we were obliged to leave them or take them home. . . . I was kept constantly on my feet; there were so many frames, and they ran so quick, the labour was excessive, there was not time for anything. When the 'doffers' flagged a little, or were too late, they were strapped. Those who were last in 'doffing' were constantly strapped—girls as well as boys. I have seen the overlooker take a strap, and a whistle in his mouth, and sometimes he has got a chain and chained the little girls and strapped them all down the room."

Is it any wonder that the Act prohibited night-work by young people under eighteen years of age in any textile factory (with a few exceptions, like lace factories)? No person under eighteen was to be employed more than 12 hours a day or 69 hours a week. No child under nine was to be employed at all except in silk mills. No child under eleven during the first year, twelve during the second year, or thirteen during the third year after the passing of the Act was to be employed more than 48 hours in a week, or more than 9 hours in a day, and when not working they were to be educated.

Lord Shaftesbury was not by any means satisfied

with the Act, but he now had to meet the full force of the arguments of the "free-traders" and of the extreme "let-trade-alone" politicians in the reformed House of Commons. Thus, in spite of a very strong agitation in the country, especially in Yorkshire, for an Act of Parliament to enforce a "Ten Hours Day" for all factory workers, it was not until 1844 that success came to Lord Shaftesbury. In Parliament the question had been an issue in the great quarrel between the agricultural landlords and the manufacturers. The manufacturers who wanted the Corn Laws repealed held up to scorn the conditions of life and labour of rural workers. The agriculturist poured contempt on the conditions of life and labour of the factory-workers.

However, in 1844 Sir Robert Peel, the Prime Minister, after Lord Shaftesbury had twice defeated the Government on a vote, agreed to an Act which limited the working hours of persons of thirteen to eighteen years, and of adult women, to 12 a day, and provided that the working hours of children under thirteen should be 6½ hours per day, and that in winter 2½ hours, and in summer 3 hours, per day should be spent in school, that fines should be inflicted on employers for every person employed against the Act (instead of for each offence as before) and that machinery should be protected, so that the alarming numbers of dreadful accidents should be lessened.

In 1847 Mr. Fielden got through an Act which made it illegal for young persons between thirteen and

eighteen years and adult women to be employed for more than 12 hours a day, including meal-times of 2 hours.

Meantime, similar regulations were being applied to other industries. In 1842 a Mining Act entirely prohibited the employment of women and children in mines. In 1850 the inspection and supervision of coal-mines was secured. In 1867 all factories were brought under the law, and in 1871 under the supervision of government inspectors.

In 1874 it was made illegal to employ children under ten years of age in factories. In 1878 the Factory and Workshops Act was passed, defining a distinction between workshops and factories; factories were defined as places using mechanical power. In 1887 a Truck Act was passed to prevent the payment of wages in any other way than by money, so that it was no longer allowable for an employer to make his workers take part of their wages in goods from the employer's store. In 1891 children under twelve were excluded from factories and workshops. The Employment of Children Act of 1903 brought in all children. The Workmen's Compensation Act of 1906 compelled employers to compensate any worker who became disabled in the course of his work. In 1908 the miners got a statutory "Eight Hours Day." In 1911 a compulsory half-holiday for shop assistants was ordained, and in the same year a system of compulsory unemployment insurance began.

Such a bare list of Acts of Parliament perhaps conveys very little to our minds at first. But we must remember that a hundred years ago children of five and six years of age were being employed daily for fourteen or more hours a day in any sort of dirty, unhealthy building, and that now children of the same age are cared for in healthy schools all day, receive medical attention when they need it, and are fed if their parents are out of work and unable to buy food for them, and are not allowed to go to work during school hours until they reach the age of fourteen years. Let us remember also that it has taken over a hundred years for public opinion to reach this stage, and that there are still thousands of people who are not really convinced of the need for all this solicitude for the welfare of the young.

Then, too, think of the factories of to-day. Many of them are as clean and healthy as they can be made. The best of them have recreation-rooms, reading-rooms, dining-rooms for the use of the workers, as well as playing-fields and many clubs and societies.

If Francis Place, or even William Lovett or our own great-grandfathers and great-grandmothers, could come back now to examine the conditions of industry they would be amazed by the enormous improvements. To them the worst of our present evils, our slums, our overcrowding, our processions of hungry unemployed, would seem very small things compared with the conditions they knew. They would see the great

majority of English working people and their children decently clothed and decently housed, living on a variety and plenty of foods such as they never knew—excellent meat and fish all the year round, no bread famines, an ample supply of vegetables and fruit throughout the year, and many fruits, like tomatoes and bananas, that they had never heard of; great supplies of tinned fruits and foods such as they never saw.

Nowadays the great majority of families go away to the seaside for at least a few days every summer, whereas they never got away at all; most of them never saw the sea, and never went farther from their homes than the nearest market towns.

They might look into a good miner's home and, to their amazement, find it thoroughly well decorated and furnished, yet wall-papers were hardly known a hundred years ago; our great-grandparents had to be content with whitewash. They would see nicely framed pictures and good carpets; plenty of crockery and cutlery; a parlour almost certainly with a piano or a gramophone, and a few shelves of books. And no matter to what class of industry they turned they would find many thousands of working-class homes quiet, clean, orderly, and very comfortable.

Perhaps they might, with their old ideas of freedom and competition and "every man a right to please himself," be horrified by the fact that few men are nowadays allowed to work for less than the rate of

wages fixed by the trade union or by the Trade Board appointed by the Government.

Possibly they might even be disgusted to find many men being paid, not according to the work they do, but according to the time they spend in the factory. They might even be heartily ashamed of some of their great-grandchildren who deliberately do as little work as they can day after day and still expect to receive a full day's wage. But, whatever else they might feel, we may be quite sure that they would wish that they had had such excellent chances of being comfortable and healthy.

They would look at our schools, many of them really beautiful, bright buildings, full of fine pictures and books, places where music and games brighten the rotation of more important lessons. They might remember that in 1833 the Government thought itself very generous when it first gave £20,000 for education, whereas education now costs the Government over £50,000,000 a year apart from the charges on the local rates.

They might remember the great controversy which culminated in the Education Act of 1870, or the arguments which led in 1891 to Free Education for all. But if we told them about the Education Act of 1918, by which children must remain at school till they are fourteen, by which, within a reasonable number of years young people up to the age of eighteen must attend classes in work-time for at least eight hours a week

if they have not attended school full time up to the age of sixteen, surely they would be bewildered by the profound change that has taken place.

We should show them our great free hospitals and infirmaries where even the very poorest may be cared for as if they were rich. Many of our great-grandparents would have heard of Florence Nightingale's work in the Crimean War; we should be able to tell them that she did far greater and more important work in England after the Crimean War by literally compelling a reform of English hospitals and infirmaries; she, more than any other person, made them what they are now.

We should hand the old people, to their utter astonishment, into a comfortable, smooth-running motor-car, and run them to our great water-works—Manchester gets its water from Thirlmere, Liverpool from North Wales, several Midland towns from the Peak. In the old days wells, brooks and streams, though often polluted, were the usual supply of drinking water.

Then we could give them a look into our system of drainage—the merest slum cottage linked up to a sewer that is emptied at great sewage farms where all the filth is purified. We should bewilder them by our supplies of gas and electric light, by our gas cookers and our electrical appliances. They would marvel at our level streets and roads carefully swept. They would stand in awe to watch the policeman on duty at a busy crossing.

And so it would go on ; and if they asked us how it had come about, all we could say would be something like this : " Well, you see, it is the growth of public opinion." It swept away the old Parliament of 1832, and after that the best manufacturers and the best folk generally began to see that the happier and more comfortable work-people are, the better it is for everybody. And, as schools became more common, more and more of the work-people began to see things for themselves and to understand better. So they formed trade unions. Then their influence made itself felt in Parliament and in 1867 artisans were given votes.

After that a good deal was done for working folk : the Education Act, 1870, for example, and the Trade Union Act. By 1884 even the labouring classes, as distinct from the skilled artisans, had found their voice and their understanding. Thus there came another Reform Act in 1884. Then it was the women's turn ; and in 1918 all men of twenty-one and all women over thirty got votes ; possibly we shall now see many things done to help women.

And all the time, of course, after the Municipal Corporations Act (1834–5) the towns have been practically self-governed, and they have steadily developed their powers and improved their towns until now they own great tramway systems and vast electricity and gas works, as well as sewage works, baths, libraries, and, for every child, schools and medical services.

So throughout the whole country since 1820 people

LIVERPOOL IN 1797.
(From an engraving published in that year.)

A LARGE SHIPYARD ON THE MERSEY.
(By kind permission of Messrs Cammell, Laird & Co., Ltd.)

THE MANCHESTER EXCHANGE IN 1810.
(*From an engraving of that year.*)

THE BANK OF ENGLAND IN 1816.
(*From an engraving by Havell published in that year.*)

of all classes have been combining from time to time to improve the conditions of life for each other. In fact, the most striking feature of English life during the past hundred years is perhaps the extent to which the various classes of society have co-operated to secure some particular improvement in social or industrial conditions or to maintain the national security and well-being.

No working-class movement has achieved much that is worth gaining without the active and cordial help of influential groups of employers, usually at their own expense.

The fact really is that the normal Englishman, no matter to what class he belongs, is, in any controversy, anxious only to see both sides of a case and to seek a fair compromise. Thus there never has been what is called a "class war" in England, and while that spirit of give and take lasts as the chief English characteristic there never can be a "class war."

CHAPTER XIII

CREDITS, COLONIES, AND THIS AGE OF COMPANIES

IN the vast changes we have been considering there are at least two more important factors which did a great deal to make the change possible.

One of these has already been touched upon—the acquisition and growth of our colonies in the eighteenth century and their development into the mighty British Empire in the nineteenth century. At first these colonies were looked upon by the mother-country only as sources from which we got material such as could not be produced at home—spices, ivory, silk, and objects of art from India, and timber, furs, and leather from the American colonies. But before the nineteenth century had run half its course this country had become dependent on them for much of its food and for vast quantities of raw materials for our industries. Without that food and without those raw materials British industrial expansion could not have taken place as rapidly or as fully as it did.

We are not here concerned with the history of our colonies and dominions; but it is of great importance to notice another far-reaching effect of our development

as a colonial Empire. We became by far the most skilful builders of ships in the world, and before long we owned a very large proportion of all the ocean-going merchant ships. The beginning of this development was largely due to the Navigation Acts, which made it illegal for trade to be done with English ports, or to and from our possessions, except in English ships owned and manned by Englishmen. The first of these Acts was in the reign of Richard II, but the really important one was the work of Oliver Cromwell in 1651.

Now it is true that such Acts were always difficult to enforce, and that the smuggling in of goods from Dutch, French, or Portuguese boats was always going on. In particular there was much illicit trading of this sort with our American colonies. But the point to be remembered here is that the general policy aimed at by those Acts, whether they were being enforced or not, stimulated the building of ships in England and the buying or hiring of such ships by English merchants. As a consequence England became the world's greatest sea-faring and trading nation: her ships are in every port, she does by far the greatest share of the fetching and carrying of goods for all the nations of the world, and in that way alone earns a vast annual income. By means of those ships she founded and has been able to maintain the British Empire.

But that raises the question: "Who found the money for all these developments?" And in answering that question we explain the importance of the

other great factors which made the Industrial Revolution possible.

In the fourteenth and fifteenth centuries it was a comparatively easy and simple matter for a small number of Merchant Adventurers to pool their resources to buy and equip a ship or two at a cost of a few hundred pounds. If, as at York, the Merchant Adventurers formed a powerful and wealthy corporation, the matter was simpler still. They bought their ships, loaded them with English cloth, and sent them to venture forth to find a profitable market for it. Part of the cloth would be exchanged for silks, or wines, or spices, or fine metal-work, part would be sold for money, and the ships would return to England to sell the produce of, say, the Levant, at a huge profit. The profits were then shared amongst the Merchant Adventurers who had co-operated. If the ships never returned, having been lost at sea, or captured by pirates, or by rival merchants, then the losses were shared.

But it is clear that all this was a very personal matter : only a few people were concerned, the actual amount of each of the ventures was relatively small, and the voyages themselves were never farther than the Mediterranean, and were usually only to the ports of the North Sea and the English Channel.

But with the discovery of America and of the sea-route around South Africa to India, with the opening up of South America and the Pacific Ocean, the journeys became not only longer, more dangerous, and more

hazardous, but bigger ships were required and bigger cargoes. Moreover, it became necessary in these new lands for stations (forts or factories, as they were called) to be established and maintained by Englishmen who could then collect and warehouse goods until ships came to exchange English goods for them.

In other words, every venture needed a great deal more money than the earlier ones. So much money, in fact, was needed for some of these early trading voyages that it simply could not be found. If the ship-builder said, "I want 500 gold marks before I hand over this ship," it was often impossible to satisfy him, if a cargo was also to be bought and the ship manned and equipped. But suppose the merchants were able to say to him, "We'll give you 200 marks down and a legally binding written promise to pay you the rest in six months, whether the ship returns or not." He would probably agree, after first inquiring about the positions of the merchants and satisfying himself that they were honourable men.

In other words, he gives them credit. Now it is certain that during the sixteenth and seventeenth centuries there must have been thousands of such transactions in the building of ships, in the buying of cargoes, and in the raising of expenses. There were so many, in fact, that a definite system of credit grew up. Even the promises to pay, even the bills for the foods supplied on credit, were bought and sold.

For example, suppose the ship-builder we have just

mentioned needed ready money urgently at the end of two or three months ; he might go, say, to the Goldsmiths' Company of London and tell them of his predicament. They would satisfy themselves of the standing of the merchants concerned and would say, " Very well, we'll buy your bill for 350 marks, and the merchants will settle with us." As a matter of fact the Goldsmiths' Company did actually become one of the chief channels through which money might be lent or borrowed, and bills bought and sold.

They became so wealthy that in 1672 King Charles II (whose Parliaments never trusted him with enough money) borrowed from the Goldsmiths' Company £1,300,000 and promised to pay them 8 per cent. interest until he was able to pay the whole sum. But, having got the money, he declared he would pay only 6 per cent., and did not intend to repay the principal. This incident alone is sufficient to illustrate the extent to which credit was being sought and obtained.

Yet barely two centuries before, the law had been severe against " usury," that is the taking of interest for the loan of money ; it was not only illegal ; it was considered wicked—a method of making profit which no Christian ought to practise. It was, therefore, left to such people as the Jews, who, right through the Middle Ages, were despised and often persecuted because they were money-lenders and usurers. But the fact was that by the fifteenth century there did not exist in England sufficient coined money (or cash) to pay

for, at any given time, the whole of the big transactions going on. Trade and industry were developing on a very much larger scale than ever before, and it was of the utmost importance that new systems of payment should be developed.

It was owing to this need that the Goldsmiths' Company grew to be very much like what we now call a bank. Its receipts for money lent were as good as money; they were indeed what we should now call bank-notes. Before long many private banks were created: some were famous ones, like those of Messrs. Child at Temple Bar, and Messrs. Hoare in Fleet Street; but many others were quite small affairs not too well managed. Before 1750 practically all these banks were in London; there were only twelve bankers' shops outside London at that date.

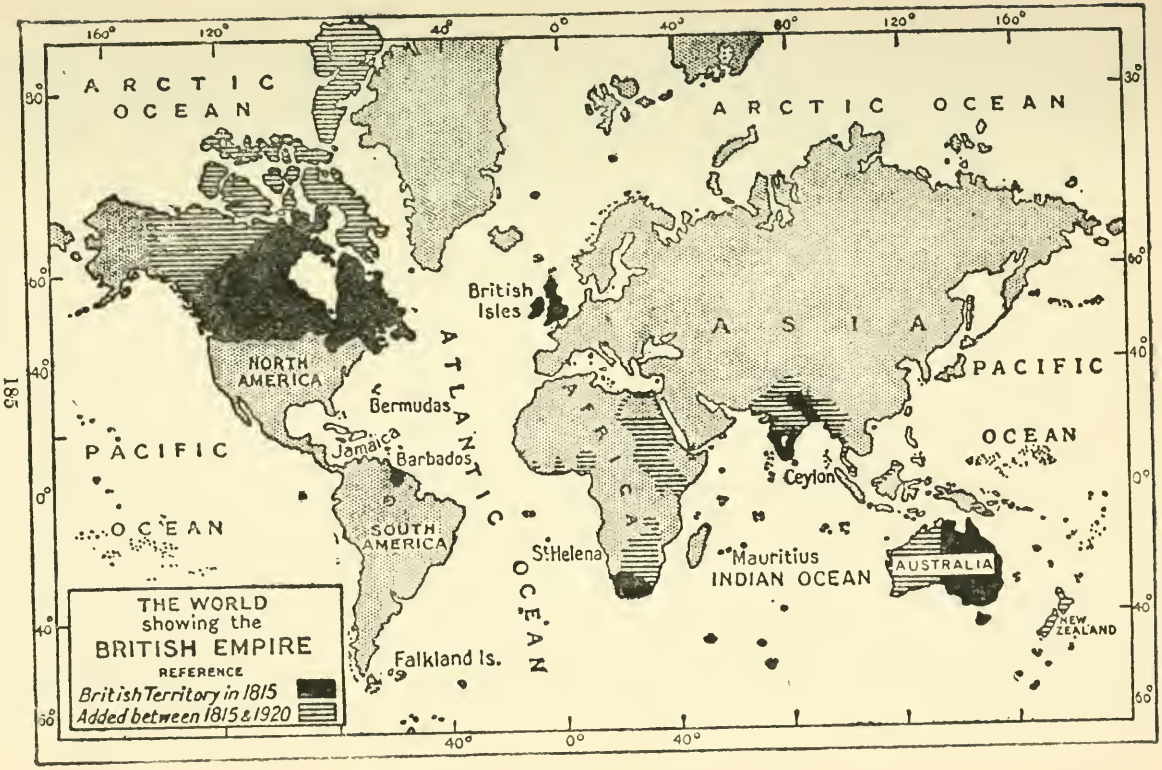
But as the Industrial Revolution developed there grew up an enormous number of small private banks both in London and in the provinces, especially in the northern areas. Just as in Elizabethan and early Stuart times money, and particularly credit, were urgently needed to meet the expansion of trade overseas and the growth of the Domestic System of Industry, so, after 1750, money, and particularly credit, were even more urgently needed to finance new inventions, to open up mines, to build factories, to build and equip ships, to establish colonies. Whoever made large profits wanted to put his money into secure hands, and here were banks ready to pay him interest for lend-

ing them the money. Whoever wanted to extend his business or to tide it over a bad period, the banks were ready to lend him money if he would pay the required interest. Many fortunes were made and lost in this way.

Many of the bankers were small local tradespeople or lawyers, who, even when they were perfectly honest, were unskilled as bankers and sometimes unable, owing to unfortunate lending, to meet their liabilities. For it should always be remembered that many inventions were failures, many mines and factories unprofitable, many ships lost, many voyages unremunerative. Too often, when speaking of the Industrial Revolution, we think only of the successes, not of the thousands of failures.

Fortunately, however, financial conditions were not as insecure after 1750 as they had been in 1672. For in 1694, when William III wanted to raise money, the Bank of England was founded. It was a private bank, but, unlike the Goldsmiths' Company, which it superseded, it was backed by the Government, who made the interest at 8 per cent. on £1,200,000 a charge upon the taxes.

The idea was William Paterson's, but it was Montague, William III's financial adviser, who got the scheme into operation. The company which was formed consisted of a governor and twenty-four directors, who were to be elected annually by such members of the company as possessed £500 capital stock. The com-


ARCTIC OCEAN
ARCTIC OCEAN
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Jamaica
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PACIFIC OCEAN
ATLANTIC OCEAN
AFRICA
SOUTH AMERICA
St Helena
Ceylon
Mauritius
INDIAN OCEAN
AUSTRALIA
NEW ZEALAND
Falkland Is.
THE WORLD showing the BRITISH EMPIRE
REFERENCE
British Territory in 1815
Added between 1815 & 1920

pany was formed by a Royal Charter, and was not allowed to trade in anything but bullion, bills of exchange, and forfeited pledges ; it was not allowed to lend money to the Government without the consent of Parliament.

The Goldsmiths tried hard to ruin the Bank of England by buying up all its bills, promissory notes, and receipts, and taking them to the Bank for payment in cash, well knowing that the bank had not enough cash ready. Luckily the Bank was able to gain time by questioning the legality of this procedure, and was able to get enough cash to restore public confidence in their ability to pay.

Other similar crises occurred from time to time. In 1745, during the Jacobite Rebellion, many people were so alarmed at the advance of the Young Pretender that they wanted their money out of the Bank ; the rush was great, and if it had not occurred to someone in the Bank to insist on everybody taking all their money in sixpences (in order to gain time to get cash together) the Bank might have had to suspend payment.

In 1792 there was a very serious crisis. Many of the country banks had issued far more paper-money (that is, promises to pay) than they could possibly cash if at any time it were necessary to do so. As many of them were very small local banks, with their business pretty well known and their notes circulating chiefly in their own areas, it is easy to see that if any general financial panic occurred there would be a very large

proportion of these notes presented for payment in cash. The panic did come largely as a result of the terrible happenings in France: over fifty of these country banks were unable to cash large numbers of their notes and were therefore ruined, along with many of the people who had lent them their savings.

Fortunately the Bank of England survived. But in 1797 matters were even worse. So many people were honestly afraid that the French would invade England that they wanted their savings in gold and tried to get them from the various banks. Then, too, money and credit were very difficult to get because of the heavy taxation and expenditure for the war, and because a series of bad harvests had made it necessary for us to buy much food from other countries.

The Bank of England began to pay in cash, but before long barely £1,000,000 in cash remained in its cellars. At that point the Government intervened. A proclamation was issued forbidding the Bank to pay in cash, and Parliament passed an Act for the Suspension of Cash Payments.

The Act was intended to be only a temporary measure to safeguard the Bank until public confidence was restored. But it remained in force until 1821, so that for twenty-four years it was illegal for the Bank to pay in cash more than twenty shillings at a time, or to advance more than £600,000 to the Government. But it was allowed to issue notes for smaller sums than £5, and again the Bank was saved.

This episode is important to us for two reasons. In the first place, notice that the period when the paper-money had to serve for all payments over twenty shillings in amount was the most difficult and distressful stage of the Industrial Revolution.

In the second place, remember that early in the Great European War, 1914–18, an almost exactly similar procedure was adopted. Gold coins were rapidly replaced by notes for £1 or for ten shillings ; in other words, cash payments were suspended.

We, at any rate, know by bitter experience that a paper pound is not worth as much as a gold sovereign. In other words, as soon as our gold currency is replaced by a paper currency prices go up ; a paper promise to pay a pound (even when it is the Government who is promising to pay) will not buy as many goods as a gold sovereign unless that paper pound can be exchanged for a gold sovereign. So that prices would have risen in 1915 for that reason alone, apart altogether from the shortage and wastage of goods caused by the war.

Knowing that, we can perhaps appreciate the effect that a paper currency had on prices from 1797 to 1821. Certainly it made life more difficult.

But to return to the Bank of England. In 1825 there was another panic, and it is said that the Bank was saved only by the unexpected discovery of a package of £700,000 in one-pound notes. Seventy other banks failed, and, of course, ruined many of their clients.

The Government again intervened. Notes for less than £5 were made illegal; joint stock banks were allowed to be established so that many of the small banks might combine; and the Bank of England was allowed to establish country branches.

In 1833 the Bank Charter Act was passed, enacting that the notes of the Bank of England were to be legal tender; that the Bank should not issue notes amounting to more than three times the value of the specie (gold) it had in its cellars, and that it should publish quarterly a statement of its issues and its gold reserve.

This Act was largely the result of Francis Place's campaign for the Reform Act of 1832 (see p. 127). A further Bank Charter Act, 1844, enacted that the Bank should not be allowed to issue more than £14,000,000 in notes unless a corresponding amount in specie were retained. Perhaps more important still, no new banks established were allowed to issue notes.

Sir Robert Peel's Act of 1844 was the last important piece of legislation affecting the Bank of England. It placed the Bank on a secure basis and provided strong reasons for public confidence; in other words, it established a sound basis of credit both for national and private purposes.

For it should always be understood that all other banks have been dependent to a great extent on the Bank of England, and especially since 1844. Then, too, we must not overlook the fact that the Act of

1825 allowed the formation of Joint Stock Banks. From that time to the present the number of private banks has diminished. They have amalgamated with or become absorbed by such great Joint Stock Banks as the London, Westminster, and Parr's Bank, the London Joint City and Midland Bank, Lloyds Bank, etc. Each of these great banks has branches all over the country, and there are nowadays few villages of any size in which at least one of these banks has not a branch.

Thus it is to us the easiest, simplest, and safest thing to pay our savings (when we have any) into a bank and to draw money out as we wish. Again, in periods of slump or difficulty, thousands of shopkeepers, business men, and employers of labour in all industries have to rely on loans from their bank to tide them over. But, of course, the bank is very careful not to lend money to any one whose own credit is not good, and who has no sound security to give to the bank.

But even the facilities for obtaining credit from banks have not been sufficient to finance the enormous development of industry which we have outlined. From the time of Queen Elizabeth companies have been formed to carry on businesses involving risk of loss that was too big for any one man to incur. The earliest companies were formed by Royal Charter. For example, the Company of Merchant Adventurers of England (originally formed in 1359) was given a

charter by Queen Elizabeth. The Russian Company, chartered in 1554, the famous East India Company (1600), the Hudson Bay Company (1610 and 1670), and the companies like the Virginia Company (1609), and Massachusetts Bay Company (1629), formed to create American Colonies, are all examples of early chartered companies. More recently the British North Borneo Company (1881), the Royal Niger Company (1886), and the British South Africa Company (1889) have been chartered.

But there was another way in which companies could be established.

Indeed, the great majority of the Companies existing nowadays were not formed by royal charter, but under the Companies Acts. The most important of these Acts (which began in 1855) is one passed in 1862. Under it any seven persons (who comply with the legal conditions) may form a company. Suppose, for example, a man discovers a new, cheaper, and better way of constructing a motor-car engine. He wants to produce large numbers of these engines because he is sure they will, when tried, supersede other kinds. How is he to obtain the necessary money to buy a factory, to equip it, to purchase the necessary raw materials, to pay the huge wage-bill which must be incurred for months before he can begin to turn out cars ready for the road ?

Obviously he has to convince many other people of the value and practicability of his invention before he

can get them to lend him money. At any rate, he must convince six others before he can form a company. But, having formed a company of at least seven people who are prepared to risk money for his ideas, he issues a prospectus telling about his scheme and promising to pay, say, 6 per cent. interest to anyone who will buy so many £1 shares of the million shares he proposes to sell.

If the general public are convinced that his ideas are sound and likely to be successful many of them buy shares by fifties, hundreds, thousands. The money they pay for them provides the means for producing the cars. If the cars are very successful, if the company and the business generally are well managed, the interest is regularly paid and may be handsomely increased.

Moreover, the buyer of the shares is able to sell them whenever he likes. There is a great market for shares, called the Stock Exchange. In fact, thousands of men spend their whole time in buying and selling shares for other people.

It is, indeed, no exaggeration to say that this is an age of companies. Almost every aspect of our daily life is dependent on some company or other. Our food is imported by companies, sold by companies. Our clothing is produced by companies. The great majority of English people work for companies—railways, shipping, engineering, cotton and woollen goods, mines, quarries, and factories of all descrip-

tions nearly all belong to companies. And this result has come about almost entirely in the last sixty or seventy years.

The example had been set by the chartered companies, and particularly by the Insurance Companies which, beginning about Queen Elizabeth's time, though the idea of insurance was earlier, were formed so that owners of ships, or factories, or large stocks of goods might insure themselves against loss by fire or other risks. Nowadays a man insures himself, his house, his factory, his motor-car, his goods. That is, for a small annual payment (premium) to an Insurance Company, he receives a promise (policy) by the company to pay him the value of what he loses, or to pay his heirs an agreed sum of money if he dies. By this means trade and industry are made still more secure and public confidence is fostered. By this means also a large number of extremely wealthy insurance companies have been built up, and on the model of the earlier ones many of the first industrial companies were founded.

Most of the early enterprises after 1750 in mines, factories, or foundries were carried out by one man or by two or three men acting as partners. For example, Arkwright, Strutt, Peel, and Owen ran their own cotton factories. Fairbairn and Nasmyth, early makers of machinery; Crawshay and Wilkinson, the pioneers of iron founding; Neilson, the inventor of the hot blast in furnaces; Gott and Horsfall, woollen manu-

facturers, all ran their own works. There was then a close personal relationship between employer and employed, and, if the employer was a good one, like Robert Owen, the effect was thoroughly wholesome for everybody. If he were a bad one the results may be imagined.

But when a mine, a factory, or a foundry was acquired by a company this personal relationship often disappeared. There may be thousands of shareholders interested in our motor-car company, but they are widely scattered; most of them have never seen and never will see the factory; their interest is confined to the dividend they will receive. So the company appoints a managing director whose first business is supposed to be to ensure that the company makes big profits. He must, therefore, produce every part of the car as cheaply and yet as efficiently as possible. He must manage the workpeople and their trade unions so skilfully that they will work industriously and contentedly, so that no difficulties about wages or conditions of labour may arise to be referred on the one hand to the Association of Employers (of which his company is a member), or to the great Union of Engineers on the other hand.

It is difficult for us to imagine the immense differences this development of industry by companies has made. A hundred years ago practically the whole of industry was run by private individuals in a personal way. The prospects of the business were their pro-

spects; its losses were their losses. In those days the workers saw every day the man on whom the whole business depended. They watched his face and studied his temper daily to find out how things were going with him. Nowadays who in particular is interested in any one of the huge companies, many of them representing many millions of capital? Who cares whether any of the tens of thousands of men and women employed by one of these companies are being fairly and humanely dealt with if dismissed?

It is this lack of "personality" in a company which has led to many work-people losing interest in their work, and giving as little labour and zeal as possible for the regulation wages.

Of course, if everybody were sufficiently broad-minded, just, and sympathetic we should all see that unfairness, idleness, waste, is always at somebody's expense, and is especially damaging to the nation as a whole. A few bad bricks in the base of a tall tower may bring the whole structure down with a crash. Therefore, while it is of course wholly good to criticise and to try to improve our company system of industry, it is well to bear in mind that it is *our* system. The nation, our fathers, and we have produced it, and until we can improve it there is nothing but folly in any action that makes it less efficient in producing necessary goods well and cheaply and in providing for national security and well-being.

At any rate it is quite clear, if the experience of the

French Revolution at the end of the eighteenth century and of the Russian Revolution of 1918 onwards is worth anything, that no *sudden* change is likely to benefit most of us. Whatever system replaces the present company system will have to grow out of it, as it grew out of the "*laissez-faire* system," which grew out of the Mercantile and Domestic System, which developed from the Guild System.

CHAPTER XIV

THE CHANGE THAT SCIENCE HAS MADE

IT is sometimes thought that most of the inventions which have changed industry and life in England have been the result of lucky discoveries made by ordinary working men with little or no education.

It is true that Hargreaves was a working spinner, and it is probable that his discovery of the spinning-jenny was a lucky chance; but some people argue, and not without reason, that other people had the same idea about the same time. It is true that Arkwright, a barber by trade, had little education; but then it is known that he profited very largely by the ideas of others.

It is true that Brindley was almost illiterate; but then his work was not to invent, but to plan and construct canals.

It is certainly not true that James Watt was uneducated; he was a clever mathematician, and a skilful maker and repairer of scientific instruments working for Glasgow University. His improvements of the old steam-pumps invented by Newcomen were

the result of most careful research and study, and they are to this day the main principles on which modern steam-engines work.

Nothing could be further from the truth than the idea that most of the discoveries which have produced steam-engines, steamships, electricity, telegraphs, telephones, and wireless telegraphy and telephony, coal-gas, gas-engines, petrol-engines (whether for cars, ships, or aeroplanes), the wonderfully intricate machines which weave curtains, tapestries or carpets, or other patterned materials; the devices by which great swing-bridges or suspension bridges, or floating docks or lifts are worked, the powerful machines which are used in steel and iron works for rolling, cutting, stamping, shaping metals,—nothing could be more foolish than to suppose that these and thousands of other inventions and improvements in all branches of industry are the result of chance or luck.

The fact really is that behind almost all the discoveries throughout the nineteenth century there moves a growing little army of scientists, men who have devoted their lives and have been carefully trained to study the problems of mathematics, physics, chemistry, in all their various branches. Their discoveries, often after long and painful research and laborious experiments, have been applied to some branch of industry which has therefore leapt ahead.

In a book like this it is impossible to do more than take a few examples of what industry and society

(meaning you and me and all the rest of us) owe to the scientists working in their laboratories and studies.

To take the obvious things first. The safety of our shipping, voyaging in all weathers over vast oceans, depends almost entirely on what the scientists have done for us.

The seas with their currents, prevailing winds, shoals, and rocks were charted more or less accurately by generations of seamen themselves. But the scientists have made possible our great modern ships, have made possible wireless telegraphy, by which a ship may report to other ships, or to the land, whatever its condition or needs may be.

The scientists are now actually making it possible to send out boats which need no crews, but can be safely steered and directed from the land. Try to imagine what that may mean to us all if their experiments with small boats are safely applicable to big ones.

Even apart from that, the mere designing of a ship on paper before it can be built is a problem that requires a most thorough knowledge of mathematics and physics—a knowledge of the strength of materials, of where the greatest strains will come and so on.

Then, too, the engines have to be designed to give the proper amount of power. And it is scientists who have found that huge ships can be driven by oil instead of coal, so that fewer men are needed and so

that those who are needed may work under cleaner and healthier conditions.

And who has made possible the feeding of thousands of people on a ship for a week on fresh meats ? This we owe to the men who invented refrigerators and cold storage.

Turn to mining, at one time perhaps the most terrifying and dangerous of occupations. Nowadays it is one of the safest and certainly not the most objectionable ; although mines are now sunk to depths that it would have horrified our great-grandparents even to think of. It was a great scientist, Sir Humphry Davy, who, besides discovering many things about electricity, invented in 1816 the miners' safety-lamp, and explosions in mines soon became rare. Other scientists, working on problems of ventilation, have invented systems of providing good air even in the deepest workings.

Or think of lighting. Imagine the streets of any large town a hundred years ago unlighted at night. To walk through them was a real adventure. If you were sensible, you carried a torch or a lantern containing a tallow candle so that you might avoid the pools, the filth, the boulders.

To whom do we owe the use of coal-gas, of petroleum, of electricity if not to the scientists following William Murdoch's experiments from 1792 to 1798 ? Was it, do you think, by accident that a thing so delicately and finely constructed as the electric light globe was made ?

And has it occurred to you to think that life after sunset has become totally different since the introduction on so lavish a scale of these powerful illuminants ?

In former days few people went outside their houses after sunset—and in their homes the light of candles or small lamps was not very cheering. Nowadays probably the bulk of English folk can and do leave their homes to shop, to visit friends, theatres, concerts, picture palaces, and other forms of amusement long after sunset. In fact, during winter time social life for most of us does not begin till the sun has gone down ; the mine, the factory, or the office claims us all day. In the old days it would have claimed us all day and part of the night ; and even on Saturdays, when it was usual to finish a few hours earlier, there was nowhere to go to and nothing to do even if we had cared to stumble through the dark.

The development of artificial lighting has had a most powerful influence on our life and habits, and particularly on our amusements. Possibly the constant call of those evening pleasures which are so dependent on light has made the daily work in mill or mine seem even duller, and more distasteful, than it really is or ought to seem. At the same time our houses, too, are lighted.

The piano, for example, was in its childhood a hundred years ago, and there were very few pianos to be had. The gramophone and cinematograph are quite modern inventions and will probably be much

improved; yet many houses now have the former, while anyone may for a few pence see an exhibition of the latter. The invention and development of both depended on a very expert knowledge of the science of sound and light. And as time goes on small improvements will be added.

Think, too, of railway engines. Compare a modern express engine with the primitive ones produced by Stephenson. They are still to be seen carefully preserved in the stations at York, Darlington, and Newcastle. Another is at Waterloo Station, London, together with some of the old carriages. The early ones are very simple compared with our modern ones, which include literally hundreds of improvements, most of which are the result of scientific experiments and study.

And how much study has gone to the making and shaping of each part? For the earliest engines it was difficult to get two cylinders or piston-rods of exactly the same thickness. Now we have machines which will turn out ten thousand parts all exactly the same. Then, too, remember that barely fifty years ago the bicycle was coming into use. It consisted of a big wheel with a diameter of sixty inches and a small wheel of about eighteen inches. The pedals were fixed to the axles of the big wheel. A fall from one of these was a fall indeed!

And how we who lived in those days ridiculed the safety bicycle, with its two equal wheels of about

thirty inches, and with thin solid tyres ! And how we laughed still more when fat pneumatic tyres were invented ! and when women began to ride bicycles !

In the year 1900 the motor-car was just struggling through its babyhood—a rather clumsy-looking, rather noisy machine which until 1896 was not allowed on the roads unless a man walked in front of it waving a red flag. Now we have, in little more than twenty years, silent, smooth-running cars, by the hundreds of thousands, able to travel at any speed from five miles an hour to seventy or eighty with comfort and safety.

Need one mention aeroplanes and air-ships ? In 1900 Maxim made a model aeroplane driven by steam. In 1905 the brothers Wright in America were able to remain in the air for a minute by using a petrol engine to drive their model aeroplane. Two years later they managed to remain in the air while they flew a distance of twenty-two miles, and in 1908 they remained in the air for over two hours. In 1909 the monoplane appeared, and Blériot crossed the Channel in one hour and Paulhan flew from London to Manchester in twenty-four hours. In 1910 people trooped out and craned their necks to see an aeroplane. Nowadays we barely notice them as they fly over at eighty to a hundred miles an hour. Nor do we give a thought to the hundreds of skilled mathematicians and engineers, who spend all their days studying the many unsolved problems of flight and designing machines that will be still better than the last.

Nowadays motor-cars, motor-cycles, aeroplanes and air-ships, as well as motor-boats and motor-ploughs, are all driven by what are called internal-combustion engines. The early examples of these were driven by coal-gas, which was made to explode in a cylinder and so force out a piston which was attached to a crank and fly-wheel. Thus the combustion of the gas was internal, instead of external as in the case of the coal which makes the steam drive the pistons of a steam-engine. Large numbers of coal-gas engines are still used, but it was the invention of the petrol-engine by Gottlieb Daimler in 1884 that enabled such rapid progress to be made; because, by exploding petrol vapour instead of coal-gas in a cylinder, it was possible to use a much lighter and smaller engine.

Besides, petrol can be easily carried and easily vaporised, whereas gas can be carried about only in very small quantities. Thus it is common now to have motor-cycles that will run sixty or seventy miles on a gallon of petrol; or light cars that, carrying four people, will run thirty-five miles on the same amount.

The invention of the petrol-engine is in itself a revolution. Thirty years ago there was nothing on the roads but horse-drawn vehicles and foot-passengers and a few push-bicycles. Nowadays our main thoroughfares are a constant stream of motor-cycles, motor-cars, and motor-lorries. So common and so important has motor transport become, especially during strikes of

railway men and miners, that the railway companies are losing much of their revenue. For great fleets of motor-buses and motor-charabancs have linked up most of the villages with their market towns, and most towns with each other. Regular and reliable services of motors both for passengers and goods are running from centre to centre. The only problem is to produce a few modern Metcalfs, Outrams, and Macadams to make more durable roads.

And even farming is being revolutionised by the petrol-engine, which is now applied to all sorts of agricultural machines which do the work of ploughing, for example, very much faster than a man and a couple of horses could do it. Thus, the tendency nowadays is all towards the creation of large farms of a thousand acres or more ; thirty years ago the cry was all for small holdings.

Clearly the agricultural worker of the future will have to become more and more skilled as a mechanic and a motor-driver. If he does, his position on the countryside will be very different indeed from that of the old-fashioned rural labourer. For one thing, he will have to be paid very much better.

So far we have not dealt with the use of electricity as a motive power. Yet it was the discoveries of the great Faraday, who invented the dynamo, that enabled later scientists to produce electricity for industrial purposes. Electric trams and trains most of us know well enough.

There are also electric motor-cars, and as soon as the scientists have discovered a better way of carrying larger stores of electricity on the car we may expect electric motor-cars to become a very serious rival to petrol-driven cars. Already great lengths of railway lines are being "electrified," and on them we may see long trains running speedily without smoke or steam. Many factories are already driven by electricity; many mines are not only lighted by electricity but their necessary engines are driven by the same power.

In the North of England a few generating stations supply great areas with light and power, merely by the provision of cables. And the tendency to reduce the number of power stations, with their huge costly machines, and to arrange for a few large stations to supply larger areas, is steadily increasing. Yet the application of electricity to industry, whether as illuminant or power, is barely a hundred years old, and is almost entirely the work of scientists.

But there are still larger fields in which the army of scientists has worked and is still working. After all, as we have seen, probably the greatest of all the problems raised by the industrial changes of the past hundred and fifty years has been the difficulty of feeding and caring for the rapidly increasing population.

We have seen how the conversion of the bulk of the population into industrial workers producing little or no food for themselves created difficulties of food supply. We know that the crowding of great masses

of people into towns produces new problems of health and sanitation. We can see for ourselves, if we live in Lancashire, the Black Country, the Potteries, or on Tees-side or Tyne-side, how much smoke and grime industry produces in a land where formerly there was little or none. Probably that is the worst thing the scientists have given us.

But they have continually tried to improve conditions in the towns. To them we owe our sanitation. Pasteur, a great French scientist, showed that many diseases are caused by tiny living creatures (organisms, germs, microbes, bacilli); he showed that various fevers, skin diseases, and the terrible tuberculosis are due to the presence in human bodies of some of these germs, which multiply at a furious rate if unchecked. He showed the origins of some of these germs and how they might be destroyed. Amongst the greatest of his co-workers in the same field was a great British scientist named Lister, to whom we largely owe the use of disinfectants and antiseptics.

In other words, many diseases like cholera, typhus, and other fevers, smallpox, diphtheria, tuberculosis, have been carefully studied. Their causes are known and they are being slowly but surely wiped out. Smallpox, for example, is very rare in England now; yet a hundred years ago it was said that every other man one met was marked by it. Diphtheria was rarely curable in the old days, now it is not only much rarer but is curable. Tuberculosis is still very common

and often fatal, but even that dread disease is becoming manageable.

It is the scientists who have made us realise the value of cleanliness, of sunlight, of fresh air, of healthy exercise out of doors. To the scientists we owe the increasing loathing and hatred which people as a whole have for dust and dirt, for vermin like lice, flies, rats, mice ; for cesspools, evil-smelling drains, and rubbish-heaps. So we are a long long way from the days when soap and windows were heavily taxed !

Other scientists have tested our many food-stuffs. They have shown us what part of the body each kind of food or drink is good or bad for, and there is really no excuse nowadays for anyone who is ignorant of what a properly balanced diet should be. It may be that thousands have too little money to spend on food, but there is no excuse for their spending it on unsuitable foods, or foods of very low feeding value.

The general improvement in the diet of English people during recent years is almost a revolution. A town worker of to-day probably eats more varieties of food in any month than he would in a year a century ago. His food is much more varied ; he has a greater range of meats, of fruits, of vegetables, of cereal foods to choose from. Perhaps more important still, he can have them all the year round.

This again we owe in the main to the scientists, to the highly trained experts in the various branches of science. They, all the time, have been behind the vast changes

that have taken place; they have taught their discoveries to their pupils in colleges and universities, they have written about them in magazines and books —they have provided the ideas for the captains of industry who have produced the Industrial Revolution.

That Revolution is not by any means ended; it is still developing rapidly. The future of it lies less with Governments or with captains of industry or with trade unions than with our schools and colleges. The development of this country, whether looked at from the point of view of the State (the nation as a whole), or from the point of view of those who employ their fellow-men (whether directly or indirectly), or from the point of view of those who are employed in any capacity, depends for its success and its happiness on the degree to which its people as a whole are educated and trained to make the best and least selfish use of their minds and bodies.

CHAPTER XV

THE GREAT EUROPEAN WAR

THE opening of the year 1914 saw this country far more wealthy and prosperous than she had ever been before. The standard of living and of comfort of most of the people was much higher than it had ever been; great plans for improving the lives of working people were being discussed on all sides; fine schemes for developing our educational system were being prepared; trade unions were asking for, and receiving, higher wages and shorter hours, and some of the unions had become so rich and powerful that they thought they were in a position to force their demands.

Wherever one looked were the signs of prosperity; even the forceful demands by women for votes, even the threatening claims of trade unions for a share in the control of industry were signs of a great and encouraging growth of intelligence and wider aspirations. We were, indeed, the most prosperous nation in the world; we had the freest and most elastic system of Government; even though many of us were far from satisfied with it, we had to admit to ourselves that there was no better

system in existence. In no country in the world was public opinion so sane, or generous, or sympathetic. Thus, in spite of the threats of trade unions and of disorders caused by women who, quite rightly, wanted votes and were trying to get the bulk of public opinion to aid them, the outlook for our country had seldom if ever been more favourable.

Unfortunately, there had been brewing for many years in Germany a spirit of rivalry and jealousy towards England. We had been the first to see the value of colonies, and, therefore, we had received vast areas of territory in the undeveloped parts of the earth before there was a German Empire. For, prior to 1870, what we now call Germany consisted of a number of independent States led sometimes by Bavaria, sometimes by Prussia.

Moreover, we had been the first to become an Industrial State.

Many years before other countries had become industrialised the markets of the world were practically controlled by us, since we were the only nation that needed large supplies of food and raw materials, and that paid for them with the new machine-made goods.

But after 1870, Germany, under the control of Bismarck, rapidly developed into a great industrial State, very thoroughly organised and disciplined, living at first very largely on her own supplies of raw materials, and becoming very prosperous. Before

long, however, she began to feel the need of colonies, especially of colonies in the tropical and sub-tropical regions. German East Africa, German West Africa, and the German East Indian possessions were, however, small compared with India, Australia, Canada, British South Africa, and all the rest of the vast British possessions.

There grew up, therefore, in Germany a strong war-party; a set of men who were determined to build up a Navy and an Army which, when the time was ripe, would be used, not only as a sure defence, but as a means of extending the German Empire at the expense of some other country. Belgium, for example, had great territories in the Congo Basin; France had important areas in North and West Africa as well as in the East Indies.

This war-party was led and fostered by the Kaiser, Wilhelm II, under whom the German Navy grew until it began to rival the Navy of Britain. We were therefore compelled, against our will, to increase the size of our Navy and to keep on increasing it. Germany would listen to no arguments about "reducing armaments all round." To all such arguments the Kaiser or his ministers replied in some such words as, "We must have a place in the sun! We are developing our Empire; we must have ample means of defending it." When asked, "Defend it against whom?" the reply rarely amounted to much more than "You never can tell!"

Luckily for us, our rulers steadily outbuilt the German Navy. As a result the time the German war-party was looking for was long delayed. In the meantime the German Emperor kept trying to make mischief. In 1897 the Germans had seized a Chinese port, Kiao-Chau; then, with their eyes on the corrupt and ramshackle Turkish Empire and India, they planned the Berlin to Baghdad railway. During our Boer War in South Africa the Germans openly sympathised with and aided the Boers. In 1911 they tried to pick a quarrel with France about Morocco, and withdrew from it only when Britain said she would stand by France.

But the opportunity the German war-lords had been awaiting came, as they thought, in 1914. A young Serbian killed an Austrian prince. Austria, prompted by Germany, held Serbia responsible for the murder. Serbia did its utmost to conciliate the Austrian Government, but the German leaders argued, "Now is the time! We attack Serbia. Russia, the protector of the Slav peoples, will help Serbia. France is bound by treaty to help Russia. It will take months after the declaration of war for Russia to get an effective army ready; before it is ready we shall have smashed France, as we smashed her in 1870; then we shall easily smash Russia. We shall get the French colonies, possibly another piece of France to add to Alsace-Lorraine; we shall take the whole of Poland from Russia, and as much more as we can get, especially in the Baltic; we

shall get part of the Balkan States and a way down to the Black Sea; then the Turks and Persia must look out; and we shall be on the way to India."

In some such way their minds worked, as we know beyond all doubt from the published documents.

Their one point of hesitation was, "What about England? Will she join France? On the whole we think not. She has serious labour troubles, great unrest in Ireland; and, after all, she is not very fond of France. Besides, we are not hurting England—yet!"

Unfortunately for these war-lords who were leading Austria, Hungary, and all the German people to disaster, they decided that, in order to make sure of smashing France, they must rush through Belgium—the shortest route.

But many years before (1839) the German rulers had agreed, when Belgium was first made into an independent kingdom, that no such use of Belgian territory should be made. The Germans therefore broke a treaty that England and France had equally pledged themselves to support. England was therefore bound in honour to help Belgium to resist this violation of her territory. Moreover, it was clear, once the Germans had begun the attack on Belgium, that if they conquered it they would almost certainly annex it, and so gain that immensely valuable strip of coast-line opposite our own greatest port, London, and would thus become a terrible menace to us later on.

England therefore did join France and Belgium. The result we know after four years of the most horrible warfare the world has ever known.

Germany lost her Navy and most of her merchant ships; our Navy emerged stronger than ever, and we had more merchant ships than ever before. Germany lost her colonies; they were divided amongst her enemies. Our colonies were more firmly bound to us than ever before by sentiments of loyalty and by common interests.

At the same time almost every country in Europe was on the verge of bankruptcy. In Russia a terrible revolution swept away the old monarchy and the old nobility; swept away the ordinary system of Government, of law and order, of the production and distribution of food and clothing; a terrible famine followed.

Probably we in Britain, of all the European belligerents, have felt the effect of the war least. Yet for us, too, the loss has been beyond repair.

All the lines of development which were so promising have been, if not cut off short, severely thinned. There is no money now for town-planning schemes, for pulling down slums. All the plans for higher wages and shorter hours are doomed for some years. Wherever we look in our national life we are faced by the fact that four years of destructive and costly war have created a wide break, a deep gulf between 1914 and 1918, and have shattered most of our dearest hopes.

CHAPTER XVI

CONCLUSION—THEN AND NOW

WE began this book by saying the population of England in 1700 was about 6,000,000 ; in 1800 about 10,000,000 ; in 1921 it was nearly 40,000,000. We said that such a wonderful rate of increase would of itself have caused very great difficulties and immense changes.

Throughout the book we have been trying to show the nature of these changes ; and on every page we have found it difficult to make clear or even to imagine how vast the change has been. It remains for us now to try to estimate whether, and to what extent, the changes have been for good. For we must not assume, as some people are too ready to do, that any and every change is an improvement. Nor, on the other hand, must we argue, as so many people do, that because social evils still exist then our present system must be bad, even worse than " the good old times." Those " good old times " never existed except in the imagination.

Moreover, we must be careful nowadays to make due allowance for the Great War (1914 to 1918), just

as we have tried to make allowance for the French Wars of 1793–1815. We know what terrible hardships that war produced. Yet in that war the armies engaged were tiny compared with those fighting in our wars. To Wellington and Napoleon 100,000 men formed a huge army. We had over 5,000,000 men under arms, without reckoning the many millions fighting for France, Italy, Germany, Russia, Austria, and Turkey.

Our war was infinitely vaster, more terrible and more costly than those of our great-great-grandparents. To recruit, equip, and maintain Wellington's armies was mere child's play compared with the task that faced our Government. Similarly, the dislocation and difficulties caused by our war must be immeasurably greater.

Imagine the problem. Five million men to clothe, to feed, to equip; guns of all descriptions, incredible numbers of shells and bombs; appliances for and against poison gas; millions of tools; hundreds of thousands of wagons, tents, and sheds; thousands of tons of medical and surgical stores; many millions of yards of wire! Then the Navy! old ships to maintain; new ships to build and to supply; new devices against submarines! And the new Air Force needing aeroplanes and all sorts of new appliances. And all these requirements to be constantly replaced in huge quantities, as they were rapidly worn out or destroyed in warfare.

The whole energies of the country had to be concentrated on producing war material. Hundreds of new factories had to be built, hundreds of old ones had to be rapidly extended. In order to get the urgently needed material quickly the Government had to offer good prices and the employers had to begin raising wages because the supply of workers ran short. Soon there came to be a shortage of clothes and food for the civilian population ; and of course the prices of clothing and food began to rise.

Moreover, just as in 1797, the Government had to suspend cash payment ; gold was called in ; paper money was issued in the form of Treasury Notes ; this alone was enough to make prices rise. Then the Government did what the men of Pitt's day could hardly have thought of doing. They took over most of the works and factories producing war materials. They regulated hours and conditions of labour ; they fixed wages-rates ; they levied what were called " excess profits duties " on all profits made by business men over and above what they might reasonably have expected to make if there had been no war. They managed to persuade most of the trade unions to suspend their rules and allow all sorts of people, and especially boys and girls over fourteen, and women, to do work formerly done by men.

This last was literally essential since so many of the men had been taken into the Army and Navy under the Conscription Act. Yet it was fraught with many

dangers. The unions gave these concessions only on condition that the same wage-rates should be paid to all these new workers as to the members of the unions.

One great result of this was that, during later years of the war, wages in practically every trade were inflated higher and higher. Some of the wage-rates were regulated by the rise in prices! Yet every increase in wage-rates naturally enough increased the prices of the goods produced by the workers receiving the higher rates of pay.

Thus by the end of 1918 the great majority of people in Britain were receiving wages about three times greater than they were receiving in 1914. It is true that the average cost of living had risen to a similar extent. But it is also true to say that during 1918 the English working classes as a whole were remarkably well off. Most of them were working honestly enough to win the war. But many were working short hours even though we were at war. Some of them were working on time-rates and did not care how little they worked for their money so long as they worked overtime at higher rates. There never was a time when so much money was being spent on clothes at ridiculously high prices, on pleasure, at theatres and picture palaces. Also, there never was a time when there was so much grief and sorrow, so much agony of mind in the country. Perhaps that was why there was so much pleasure-seeking.

Then came the Armistice. The production of war

materials slowed down rapidly and then stopped. Every effort was made to resume the production of peace materials; but the old channels of trade had fallen out of use; there was a very acute shortage of raw materials in many industries, and even when these were obtainable the price of them was very high because so many people wanted them. France and Belgium needed materials sorely to repair the damage to their devastated areas and impoverished peoples. There was an acute shortage of ships; freight rates were therefore extremely costly.

Thus for a time prices rose higher and higher after the war. Still the country seemed extraordinarily prosperous; the demand for cotton, woollen, leather and metal goods both here and in our colonies and in foreign countries was so acute, after all the years of shortage, that almost any price could be obtained somewhere for very inferior goods. Thus for a short time wages remained high; there was plenty of work for everybody, including the boys, women and girls; and the thoughtless folk fancied all was well. But very rapidly most of the 5,000,000 men were released from the Army and Navy. They displaced most of the boys, women, and girls, who then began to seek work elsewhere, often without success.

Then early in 1920 other most important factors began to make themselves felt. Most of the people here or in other countries who could afford to pay fancy prices had soon satisfied their needs or greed for the

time; or they had decided that the goods were not worth the prices asked. Even less wealthy people rapidly became disillusioned after buying some of the high-priced inferior goods which had been so hastily put on the market.

Then, too, it became less and less profitable to export goods to foreign countries in Europe; partly because those countries could not pay cash for them. Even if they had been able to pay cash the money of those countries was so lowered in value compared with the English pound that the price to the foreigner was simply prohibitive. If a German mark was worth in English money about one-twentieth of what it was before the war, obviously a German had to pay about twenty marks for what was really worth here only one mark. As for Austrian and Russian money, it was practically worthless outside those countries for some years after the war.

You may ask, Why should an English pound vary so much in different countries? It is a very hard question to answer simply and clearly. But in the long run it depends almost entirely on a country's credit, on what is thought to be its ability to pay promptly and in full any liabilities incurred by it.

And, since the credit of a country depends almost entirely on the prosperity of its people, and on the security they are able to give to their banks, it is clear that the more prosperous the people of a country are as a whole the safer it is for the people of other countries

to deal with them. So that the relative value of an English pound in any country's money may be taken as a fair measure of what the business world in general thinks of that country's degree of prosperity — in other words, of its *credit.*

The following table of the rates of exchange for an English pound in some of the most important countries illustrates how difficult trading of any sort was on September 1st, 1921. These values were fluctuating from week to week. For example, a month later over 400 German marks were needed for £1 ; a few months later over 100,000 marks were wanted for £1. The uncertain values, added to the doubt whether the goods could ever be paid for in some countries, made trade almost impossible.

In Paris £1 was in 1914 worth 25·22 francs ; in 1921 (September) 47·5 francs ; in 1924 (May) 67·5 ; in 1926 (Jan.) 128·75 francs.

In Berlin £1 was in 1914 worth 20·43 marks ; in 1921 (September) 320·0 marks ; in 1924 (May) 18 billions ; 1926, 20·42 rentenmarks.

In Austria £1 was in 1914 worth 24·02 kroner ; in 1921 (September) 3000·0 kroner ; in 1924 (May) 310,000 ; 1926, 34·5 schillings.

In Brussels £1 was in 1914 worth 25·22 francs ; in 1921 (September) 49·0 francs ; in 1924 (May) 82·5 ; 1926, 107 francs.

In Italy £1 was in 1914 worth 25·22 lire ; in 1921 (September) 84·25 lire ; in 1924 (May) 97·5 ; 1926, 120·6 francs.

In Switzerland £1 was in 1914 worth 25·22 francs ; in 1921 (September) 21·77 francs ; in 1924 (May) 24·60 ; 1926, 25·2.

In Stockholm £1 was in 1914 worth 18·159 kroner ; in 1921 (September) 17·15 kroner ; in 1924 (May) 16·62 ; 1926, 18·17.

In Amsterdam £1 was in 1914 worth 12·11 florins ; in 1921 (September) 11·73 florins ; in 1924 (May) 11·72 ; 1926, 12·12.

In New York £1 was in 1914 worth 4·86 dollars ; in 1921 (September) 3·73 dollars ; in 1924 (May) 4·38 ; 1926, 4·87.

It will be noticed that in Switzerland, Sweden, and Holland, which took no part in the war, and in the United States of America, which did not enter the war until it was nearly over—in these countries the English pound was worth less than before. But in the countries involved in the war throughout, our pound was worth more; sometimes, as in the case of Germany, Austria, and Poland, very much more. It should also be remembered that for many years the pound fluctuated in value almost daily in each country.

Naturally, the countries which lost the war lost credit, merely because they lost; they have huge debts, heavy taxation, big indemnities to face, and much smaller opportunities of trade than they had before.

Equally natural is the loss of credit in the other countries engaged in the war even though they won. They, too, are badly in debt; they borrowed huge sums on which they must pay interest, apart altogether from repaying the principal. They are heavily taxed; they have lost in killed and disabled hundreds of thousands of workers; the greater part of all the goods produced during the years of the war was munitions and was utterly destroyed, or is now of little or no use.

For over four years these countries were engaged in destroying the larger part of what their workers were producing; whereas in peace time they are using beneficially what is produced. For example, think of all the iron, steel, and copper utterly destroyed during

the war ; and imagine the useful machines, appliances, and utensils this same metal would have made if applied to peaceful purposes. As it was the things useful and necessary for life were being destroyed ; the very basis of our existence was being rapidly undermined.

The loss of national credit was inevitable in such circumstances. Thus, from one cause and another, English manufacturers soon began to find themselves unable to sell the goods being produced in their works. Those years of costly destruction had completely disabled the world's credit system ; even India and China found themselves unable to buy the goods they needed at the prices asked.

Therefore, on the one side were employers—remember most of them are really companies run by paid managers—producing huge quantities of goods they could not sell except at a loss.

On the other hand were the trade unions, insisting on the high wages that had grown up during the war.

The leaders of the employers said, "We cannot sell our goods because the cost of production is so high. That cost is largely due to wages. Reduce wages to a level that will enable us to produce goods at a price that will sell them and all will be well."

The leaders of the trade unions replied, "Why cut wages ? Why not profits and dividends ? You have made huge profits during the war. Why should wages suffer first ?" The retort was only too obvious : "The profits have been cut. Many of us are now

working at a loss. We admit we did well for a time, but that time is over; and what with excess profits duty and the money we used to develop our businesses during the period of high prices of materials we are now on the verge of bankruptcy." And it was perfectly true, for as the year 1921 passed the newspapers almost daily showed the dangerous state of many huge businesses. For, as the accumulated stocks of goods became more and more unsaleable their values fell rapidly. Stocks which at the beginning of 1921 were worth, if sold at the prices then ruling, £1,000,000, were worth barely half that sum six months later, and the company that held them naturally lost half its credit.

Still the trade unions were not convinced. They argued that for the first time for centuries the English working classes were having a good time; most of them had now a surplus over the cost of living, were able to buy better clothes, to spend more in luxuries and pleasures. They were determined not to surrender their gains if only because they were not sure (1) that prices would fall along with wages, (2) that profits for employers and shareholders would not be unfairly swollen.

The first great conflict came with the miners. Employers all over the country maintained that coal was too dear to enable them to produce goods at a low enough price. They argued that the miners must accept lower wages, since about three-quarters of the price of a

ton of coal was wages. Now the miners' wages had been increased in order to stimulate them to produce more coal, which was so urgently needed during and immediately after the war ; and the price of coal had been more than trebled since 1914. The miners were, therefore, far better off than ever before. Moreover, many of their leaders thought that the opportunity had now come for the miners' unions themselves, or at any rate the Government, to take over the mines, to control and to work them, and to abolish the profits made out of coal-mining by individual mine-owners or by companies.

Neither side would give way and the result was what the coal-owners called a strike, what the miners called a lockout, which lasted for over three months, during which no coal worth mentioning was produced in this country. In all parts of the country factories and foundries shut down for want of coal. Railways and shipping were very severely restricted, and in the end the miners lost their case and had to go back to work on terms that they could have obtained before the stoppage. In the meantime trade, already very precarious, had been severely injured, and the number of unemployed work-people seriously increased until nearly two millions were without work.

At first these people were able to keep the wolf from the door by living on their savings and on the small sums they received from the Government Unemployment Insurance Fund. Nobody had ever dreamed of

unemployment on such a huge scale, and no adequate preparations were made or could be made for it.

There was nothing left, for those who now had no savings and little furniture, but the Poor Law—that same hated Poor Law of 1834 which still remained in force, very little changed either in method or in spirit. Great organised processions of unemployed marched to their district Poor Law Offices and asked for relief on the following scale:

Man	15*s.* a week
Wife	15*s.* a week
For each child under 16	8*s.* a week
Towards the rent . .	10*s.* a week

In a few areas Boards of Guardians composed mainly of labour representatives, gave relief out of the rates on scales little less generous than this. But in most areas it was bluntly said that the money could not be found to pay such "doles." The rates in most areas were already so high as to be a very serious burden on trade. Moreover, to give such rates of relief would make the men without work better off than many with work. Before long the Government forbade the payment of relief that would make the man without work as well off as a man with work.

The problem was almost precisely the same that faced the Berkshire justices at Speenhamland a hundred and thirty years before, but affecting millions in 1921 instead of thousands in the earlier periods. How

closely similar the position was is shown by the following extract from Cobbett's "Rural Rides," published in 1830:

"They [the poor] pay sixpence for a pot of worse beer than they could make for one penny; they pay ten shillings for a pair of shoes that they could have for five shillings; they pay sevenpence for a pound of sugar that they could have for threepence; they pay six shillings for a pound of tea which they could have for two shillings; they pay double for their bread and meat of what they would have to pay if there were no idlers to be kept out of the taxes; that, therefore, it is the taxes that make their wages insufficient and that compel them to apply for aid to the poor-rates."

Obviously no civilised country can let its unemployed starve, since most of them would be glad to work if they could get something to do. On the other hand, if the relief given is too attractive, then the number of those who won't work if they can help it steadily increases, and the problem of unemployment becomes greater instead of less, as it did in the end of the eighteenth and the beginning of the nineteenth centuries. What, then, was to be done in 1921?

Trade was almost at a standstill; there was little promise of increase of the amount of work available. Profits for the employer were steadily dwindling and in many businesses there were no profits at all, but heavy losses. The Government was doing its utmost

to stop unnecessary expenditure; it was beginning to wonder how next year's liabilities could be met without increasing the taxes, already very heavy.

What was to be done? The only alternative to "doles" is work. But how provide work for those unemployed in the places where the unemployed are? The only kind of work the Government can safely undertake without unduly injuring organised industry is to build or improve roads, to level, fill up, or drain waste lands and make them cultivable or habitable; to improve harbours. But such works as these are seldom near the districts where the great masses of unemployed workers are, and work of this kind is arduous, and not of the kind that many of the unemployed are used to or care for.

That was the problem once more. It is the problem that always has faced Governments during periods of acute industrial and commercial depression. Probably it always will face them. If the right things are done the depression passes away quickly; profits and wages adjust themselves to each other again; orders for goods begin once more to flow in; more and more work is provided; the unemployed are steadily absorbed into industry again, and a period of prosperity sets in.

In the meantime, hundreds of employers and shareholders, if not ruined altogether, have suffered severe losses; thousands of men, women, and children have gone hungry and have had to adapt themselves to a lower standard of comfort.

Trade unions, of course, are bound to resist this lowering of the standard of comfort of many of their members. But in periods of slump or bad trade they are always in a weak position, because their members must either take lower wages or become paupers, supported by the rates; unless, of course, they prefer to starve, as some of them do.

The fact really is, as we have seen in the earlier period, that the forces that determine the economic conditions of human life are too often beyond the control of any single Government or any group of unions or of employers. They often depend on the state of trade in other lands, on famines, on pestilences. These periods of unemployment occur, and the wisest of us have not found out how to prevent them. All we can do at present is to help the country through them in the least harmful ways.

The scientific management of industries is as yet only in its infancy. There are many managers who have devoted a lifetime's study to the problems involved in the task of managing their businesses in the most efficient, economical, and humane ways.

Fortunately, the number of highly educated and carefully trained managers increases. Also more and more of the workers themselves are beginning to understand all the difficulties that face a manager and all the ways in which the interests of one industry are bound up with those of all other industries. When the majority of English people really understand that

the prosperity and security of the nation as a whole, and of every individual in it depend on intelligence, conscientiousness, and a sense of fair play for everybody, then perhaps we may be able to prevent slumps and the distress arising from them.

In the meantime we must console ourselves with a comparison between the state of affairs in the 1820's and what we are now experiencing in the twentieth century.

In the earlier period little or no useful provision for demobilised soldiers was made.

Since 1918 there have been provided at a cost of hundreds of millions of pounds generous pensions or disablement allowances for injured men; reasonable pensions for widows and orphans; a substantial gift of money to every ex-soldier; many thousands of ex-service men have been trained for various industries at a huge cost, most employers loyally re-engaging their men on return and keeping them on as long as possible.

After 1815 acute unemployment and distress rose to rebellion, sometimes fostered by Government agents and put down with cruelty. Wages were driven down, prices were driven up.

After 1918 (indeed long before) the allowances payable under the Old Age Pensions Act and under the Unemployment Insurance Act were increased in order to meet the high cost of living. Wages had been advanced in practically all trades for the same reason.

Even rural workers had a guaranteed minimum wage, rising for a time to about fifty shillings a week. (The rural worker of 1815–20 was very lucky if he got ten shillings a week.) In 1925 the first Widows' Pensions Act was passed.

In 1821 the ruling classes, with few exceptions, railed upon the idleness, viciousness, thriftlessness, drunkenness of the working poor, and called on the Government to use the Army against them, to execute, imprison, transport them.

In our time there are free schools for the children, free meals if they need them, and no child under fourteen years of age is allowed to work during school hours.

In 1821 there were hardly any schools. But factories, foundries, mines, workshops employed many thousands of young children for very low wages under very dreadful conditions.

And so we could go on. The more one reads of the social history of the early nineteenth century the more one is convinced that there was in it not one single feature that we would like to adopt now, not one single aspect of it that does not compare unfavourably with conditions in our times.

That is not to say that we are not without disgraceful features in our life to-day. We still have slums ; and, owing to the shortage of houses caused by the war, our slums are more overcrowded and unhealthy now than they were in 1914 ; but a much smaller proportion of the population is now living in really

insanitary homes than a century ago. We still have profiteers, as we had then—men who know no shame in making fortunes out of the troubles of their country or of their fellow citizens. But public opinion is now against them : the Government controlled most of them, and from all exacted Excess Profits Duty.

We still have drunkenness, idleness, immorality, and disease, but to a much less degree than a hundred years ago. We still have men and women overworked ; but not to anything like the same extent as in earlier days.

Thus, although there is still much progress to be won, it is well to appreciate the immense strides that have already been made in providing for the material needs of our people. The further progress of *material* civilisation in England depends on the degree to which English people learn to appreciate and assimilate the work of the scientists.

But there is something far more important than inventions and discoveries, than factories and workshops, than class-rooms and laboratories ; far greater than associations of employers or unions of workers ; far more potent than parliaments and cabinets. All these are but the instruments by which Humanity expresses itself. If there is absent from them a spirit of sympathy and good-will towards one's fellowmen they are creating, not confidence, but suspicion ; not love, but envy ; not peace, but war ; not life, but death.

QUESTIONS FOR FURTHER DISCUSSION AND INQUIRY

CHAPTER I

(1) On a blank map of England mark the chief sheep-rearing districts in the early eighteenth century. Why do the same districts still contain the chief sheep farms ? Why do these districts no longer prepare and work up wool into cloth ?

(2) What are now the chief wool-producing districts of the world, and why ?

(3) Make a list of (*a*) the advantages, (*b*) the disadvantages of the Domestic System of Industry.

(4) Are there any trades to-day which are carried on in the homes of the workers ? Give a list, and try to explain why they remain domestic industries.

CHAPTER II

(1) Explain why a scientific system of farming could not be developed under the open-field system.

(2) Look at the plan of an open field (p. 15). If the strips marked F were those of the Lord of the Manor show how it was to his interest to get an Enclosure Act. If each letter represents a holder, say which of these holders would probably benefit *least* by enclosure.

(3) Copy the outline of this field and mark it out in compact blocks of strips, giving each holder the same amount of land as before.

CHAPTER III

(1) Why was enclosure more likely to benefit large holders than small holders ? Why must a farm include arable land, pasture land, and meadows ?

(2) How has the development of scientific farming altered the dietary of the working classes ?

(3) Compare the daily life (*a*) in summer (*b*) in winter of a poor agricultural worker of to-day with that of a similar man of 1750, assuming both to have a wife and several children.

CHAPTER IV

(1) Why was Parliament so willing to pass Enclosure Acts ?

(2) Make a short list of the most striking differences between the life of a country parson now and that of old Mr. Watson.

(3) What trades to-day remind you of the travelling tailor ?

CHAPTER V

(1) Make a list of the advantages and disadvantages of the enclosure of the open fields.

(2) Why was it necessary to produce more food in the eighteenth century ?

(3) Find out from other history books what the Corn Laws were, and why they were passed. What were their effects ?

CHAPTER VI

(1) Why did the Government try at first to restrict the manufacture of cotton goods ? And why did they remove their restrictions ?

(2) Most of the early inventions of machines were for producing cotton yarn and cotton cloths. Why was this ? Why not for wool ?

(3) How would the French Wars (1793-1815) affect the demand in England for (*a*) iron and other metals, (*b*) cloths, (*c*) foods, (*d*) timber ?

(4) Canals, roads, railways, ships. Explain the growing need after, say, 1760, for better, safer, and quicker means of transport. Give the names and dates of the pioneers in constructing each of these.

CHAPTER VII

(1) What do you consider were the worst evils of the Factory System ? which of them were *old* evils ?

(2) "The Factory System made it possible for trade unions to be formed." Explain how.

(3) Summarise the evidence of Samuel Coulson (pp. 100–4) as to conditions under which children worked.

CHAPTER VIII

(1) Summarise the work of Robert Owen. Why were so many people afraid to have poor children taught to read and write ?

(2) The National Society is very important still. Why ?

(3) Look up the life and work of John Howard and Elizabeth Fry in larger books. Try also to show how enlightened, but how much before his time, Samuel Whitbread was.

CHAPTER IX

(1) What was "transportation" ? Make a list of small offences for which a man might be transported, or even hung.

(2) Describe a meeting of the Luddites and explain why they met and acted as they did. Did anybody benefit by machine-smashing ?

(3) Explain the effect of the horrors of the French Revolution on English opinion.

(4) Find out more about the Combination Laws. Why were they particularly unfair to the workers ?

(5) Show why periods of bad trade weaken trade unions.

(6) Why were the captains of industry so anxious to have a reformed Parliament ? Why were the old landed gentry anxious to keep Parliament as it was ? On which side were most of the poorer classes, and why ?

(7) Find out what "the notorious Six Acts" were from an Encyclopædia or big general History.

CHAPTER X

(1) How do you account for the modern hatred of the workhouse ?

(2) What were the evils of the old system of Poor Relief before 1835.

CHAPTER XI

(1) Why did the Anti-Corn Law League succeed and Chartism fail ?

(2) Make a list of the advantages and disadvantages of having trade unions.

(3) Try to show what the gaining of each of the six points of the Charter has done for the working classes.

CHAPTER XII

(1) Discuss and compare :

(*a*) A system of state regulation of wages, of hours, and conditions of labour ; or

(*b*) Complete freedom for every man to accept whatever wages and conditions he thinks fit. Give your reasons.

(2) What are the advantages and disadvantages of giving "doles" to people who are out of work ? Is there any alternative in times of bad trade ?

(3) Why is it now illegal for children under fourteen to be at work for wages during school hours ?

(4) Why was the improvement of working conditions for women and children so slow ? Who are likely to be the strongest supporters of child-labour ?

(5) Show how each extension of the franchise has benefited the classes who have just received the power to vote.

CHAPTER XIII

(1) Make a list of our chief colonies and add (*a*) the date when each was acquired, (*b*) the commodities we now get from them.

(2) Why did insurance become necessary ? How is it that Insurance Companies almost always make good profits ?

(3) Can you give any reasons why the issue of paper money to replace gold money should cause a rise in prices ?

(4) Make a list of advantages and disadvantages of the company system as compared with the individual ownership of big businesses.

(5) What is a capitalist ? Discuss the statement : "Capitalism will never be abolished until it is made impossible for everyone to save anything."

CHAPTER XIV

(1) Show how the use of artificial lighting has altered our social life.

(2) "The smoke-nuisance is one of the worst evils of the day." Show the truth of this, and try to explain why it is not remedied.

(3) How does the growth of motor-transport affect the future of (*a*) the railways, (*b*) coal-mines, (*c*) the breeding of horses ?

(4) What are the advantages of petrol engines over (*a*) coal-engines, (*b*) gas-engines ? Are there any disadvantages ?

(5) Why are infectious diseases like small-pox and fevers less common and less dangerous now than they were one hundred years ago ?

(6) Make the longest list you can of foods that your great-grandparents probably never knew.

CHAPTER XV

(1) Why did England in 1914 enter the war against Germany?

(2) Make a list of what appear to you to be the worst results of the war in England.

(3) How do you account for the fact that a war enables many people to get rich very quickly? How would you prevent this?

CHAPTER XVI

(1) How do you explain the fact that so much more was done for the working classes during and immediately after the Great War, 1914–18, than during and after the Napoleonic Wars?

(2) Why did food-prices rise so rapidly during the war? and the prices of clothing?

(3) How did the Government obtain money to pay our Army and Navy, and to buy munitions during the war? And how is that money to be repaid?

(4) Find out from a good annual reference book (*a*) the amount of the interest on the National Debt, (*b*) the amount payable in pensions of all sorts, (3) the amount required for the Army, Navy and Education. Compare these figures if possible with those for 1913.

SELECTED BOOKS FOR FURTHER STUDY

THE best authoritative account of social conditions in the eighteenth century is the *last chapter* of Lecky's *History of England in the Eighteenth Century*. The books in the following list which are marked with an asterisk are fairly short and usable by comparative beginners.

AGRICULTURE

*Prothero's *English Farming, Past and Present*; Hammond's *The Village Labourer*; *Dunlop's *The Farm Labourer*; Nicholson's *History of the Corn Laws*.

MANUFACTURES

Hammond's *The Town Labourer* and *The Skilled Labourer*; *Daniell's *The Early English Cotton Industry*; *Hutchins and Harrison's *History of Factory Legislation*; Lipson's *Woollen Industry*; Galloway's *Annals of Coal Mining*; *Dunlop's *English Apprenticeship and Child Labour*.

TRADE UNIONS, CO-OPERATION, AND SOCIALISM

Webb's *Industrial Democracy*; Webb's *Trade Unionism*; *O'Brien's *Labour Organisations*; Skelton's *Socialism*; Beer's *History of British Socialism*; Cole's books on Syndicalism and Guild Socialism.

CHARTISM

*Howell's *The Chartist Movement*; West's *Chartism*.

BIOGRAPHIES

*Rosebery's *Pitt*; *Morley's *Walpole*; *Wallas's *Francis Place*; *Carlile's *Cobbett*; Trevelyan's *Bright*; Trevelyan's *Grey*; Strachey's *Victoria*; Strachey's *Eminent Victorians* (*Manning, Florence Nightingale, Gordon, Arnold*); *McCabe's *Robert Owen*; *Morley's *Cobden* and *Gladstone*; *Fisher's *Napoleon*; McCunn's *Six Radical Thinkers*.

TRANSPORT

*Webb's *Story of the King's Highway*; Report of Royal Commission on Canals (1909); Stevens's *English Railways*; *Sargent's *Seaways of the Empire*; *Adams and Kirkaldy's *History and Economics of Transport.*

COLONIES

*Bulkeley's *British Empire*; Lucas's *The British Empire*; *Woodward's *Expansion of the British Empire*; Hankin's *British Empire.*

SCIENCE

Findlay's *Chemistry in the Service of Man*; *Thomson's *Science in the Nineteenth Century.*

SOURCE-BOOKS (INDISPENSABLE TO TEACHERS AND ADVANCED STUDENTS)

Select Documents of English Economic History, by Brown, Bland, and Tawney.

TEXT-BOOKS OF ECONOMIC AND SOCIAL HISTORY

*Innes's *England's Industrial Development*; *Marvin's *The Century of Hope*; *Cressy's *Outline of Industrial History*; *Allsopp's *Introduction to Industrial History*; *Warner's *Landmarks of Industrial History*; *Meredith's *Economic History*; *Knowles's *Industrial and Commercial Revolutions*; Mowat's *New History of Great Britain, Part III.*

REFERENCE BOOKS

Encyclopædia Britannica; Cunningham's *Industry and Commerce*; Grant Robertson's *England under Hanoverians*; Marriott's *England since Waterloo.*

SOME HISTORICAL NOVELS DEALING WITH THE PERIOD

The Revolution in Tanner's Lane, by Mark Rutherford. About the early Radical Reform Movement and Peterloo.

North and South, by Mrs. Gaskell. A beautiful story contrasting a peaceful Hampshire village with Manchester in the early nineteenth century.

Sylvia's Lovers, by Mrs. Gaskell. Deals with Whitby fishermen and shopmen, pressgangs, soldiering in the Napoleonic Wars, and moorland farms.

Oliver Twist, by Charles Dickens, Exposes the treatment of pauper children.

Barnaby Rudge, by Charles Dickens. Describes the Gordon Riots (1780).

Chippinge, by Stanley Weyman. Is based on the Bristol Riots at the time of the 1832 Reform Bill.

The Great House, by Stanley Weyman, is based on Chartism.

Sybil by Disraeli, *Alton Locke* and *Yeast* by Charles Kingsley, all deal with social conditions about 1850.

The Inimitable Mrs. Massingham, by Herbert Compton. Deals with Botany Bay and London.

Put Yourself in His Place, by Charles Reade, is a powerful story about industrial conditions and disputes.

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